



**BHARAT HEAVY ELECTRICALS LIMITED**

**HEEP HARIDWAR INDIA-PIN 249403**

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**REQUIREMENT OF CAPACITOR, RESISTANCE, FUSE, UV EPROM & DIODE**

The Heavy Electricals Equipment Plant (HEEP) located in Haridwar, India is one of the major manufacturing plants of Bharat Heavy Electricals Ltd. The core business of HEEP includes design and manufacture of large steam and gas turbines, turbo generators, Defense Items and so on.

Details of items details as below:

SLN	MAT CODE	ITEM DISCREPTION	QUANTITY (NOS.)	Delivery Schedule (Days)
1	W97050601160	0.1 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, TOLERANCE +/-20%(MAX), OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM).	220	45
2	W97050601179	0.22 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, TOLERANCE +/-20%(MAX), OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM)	220	45
3	W97050601187	0.33 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, TOLERANCE +/-20%(MAX), OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM).	220	45
4	W97050601195	0.47 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, MAXIMUM TOLERANCE +/-20%, OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM).	220	45
5	W97050601209	0.68 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, TOLERANCE +/-20%(MAX), OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM).	220	45
6	W97050601217	0.86 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, TOLERANCE +/-20%(MAX), OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM).	240	45
7	W97050601225	1 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, TOLERANCE +/-20 % (MAX), OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM).	240	45
8	W97050601233	0.82 MICRO-FARAD THROUGH HOLE CERAMIC CAPACITOR, TOLERANCE +/-20%(MAX), OPERATING TEMPERATURE -25 TO +125 DEG.C, VOLTAGE RATING 50V (MINIMUM).	240	45

<b>9</b>	W97051201050	DIODE 1N 198	<b>300</b>	45
<b>10</b>	W97051201069	VERY FAST-ACTING FUSE, PART NO :251.125 OF LITTLEFUSE OR EQUIVALENT	<b>725</b>	45
<b>11</b>	W97051207032	DIODE Z21L221 OF I.R OR EQUIVALENT. N.STD: Z21L221 OF I.R	<b>14</b>	45
<b>12</b>	W97051207067	DIODE TYPE "PROTEK" PHP500 N.STD:PHP500	<b>57</b>	45
<b>13</b>	W97053001024	M2732A-2-32K (4K X 8) UV ERASABLE PROM OF INTEL OR EQUIVALENT	<b>65</b>	45
<b>14</b>	W97053902323	10 OHM THROUGH HOLE RESISTANCE ,0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP . -55 DEG.C TO +155 DEG.C. TEMPERATURE COEFFICIENT 50PPM/DEG .C (MAX)	<b>140</b>	45
<b>15</b>	W97053902331	100 OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP . -55 DEG.C TO +155 DEG.C. TEMPERATURE COEFFICIENT 50PPM/DEG C (MAX)	<b>220</b>	45
<b>16</b>	W97053902340	1K-OHM THROUGH HOLE RESISTANCE ,0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP . -55 DEG.C TO +155 DEG.C. TEMPERATURE COEFFICIENT 50PPM/DEG.C (MAX)	<b>240</b>	45
<b>17</b>	W97053902358	10 K-OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG.C. TEMPERATURE COEFFICIENT 100PPM/DEG.C (MAX)	<b>240</b>	45
<b>18</b>	W97053902366	30.1 K-OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C TEMPERATURE COEFFICIENT 100PPM/DEG.C (MAX)	<b>240</b>	45
<b>19</b>	W97053902374	36.5 K-OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE , MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG.C TEMPERATURE COEFFICIENT 100PPM/DEG.C (MAX)	<b>240</b>	45
<b>20</b>	W97053902382	100 K-OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C TEMPERATURE COEFFICIENT 100PPM/DEG.C (MAX)	<b>170</b>	45

<b>21</b>	W97053902390	470 K-OHM THROUGH HOLE RESISTANCE , 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C. TEMPERATURE COEFFICIENT 100 PPM/DEG.C (MAX)	<b>240</b>	45
<b>22</b>	W97053902404	866 K-OHM THROUGH HOLE RESISTANCE , 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C. TEMPERATURE COEFFICIENT 100 PPM/DEG.C (MAX)	<b>240</b>	45
<b>23</b>	W97053902412	1M-OHM THROUGH HOLE RESISTANCE (0.25W) , METAL FILM TYPE, MAXIMUM TOLERANCE 5%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C. TEMPERATURE COEFFICIENT 200 PPM/DEG.C (MAX)	<b>240</b>	45
<b>24</b>	W97053902420	1.2 M-OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C. TEMPERATURE COEFFICIENT 100 PPM/DEG.C (MAX)	<b>240</b>	45
<b>25</b>	W97053902439	2.2 M-OHM THROUGH HOLE RESISTANCE , 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C. TEMPERATURE COEFFICIENT 100 PPM/DEG.C (MAX)	<b>220</b>	45
<b>26</b>	W97053902447	3.6 M-OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C. TEMPERATURE COEFFICIENT 100 PPM/DEG.C (MAX)	<b>220</b>	45
<b>27</b>	W97053902455	3.9 M-OHM THROUGH HOLE RESISTANCE, 0.25W, METAL FILM TYPE, MAXIMUM TOLERANCE 1%, OPERATING TEMP. -55 DEG.C TO +155 DEG. C. TEMPERATURE COEFFICIENT 100 PPM/DEG.C (MAX)	<b>220</b>	45
<b>28</b>	W97050601055	METALIZED POLYESTER CAPACITOR 1 MICRO-FARAD, 630V, 10% TOLERANCE. MODEL: CPM7-630V-1M-K OF FIABLE OR PM7-1UF +/-10%-630V OF EXXELIA OR ERQUIVALENT N.STD: FIABLE MAKE	<b>67</b>	45
<b>29</b>	W97051207024	DIODE JAN1N 5555	<b>135</b>	45
<b>30</b>	W97053902030	RESISTOR RE80G2R20	<b>10</b>	45

1. EARLY DELIVERY ACCEPTABLE.

2. ALL VENDORS TO PROVIDE POINT WISE REPLY/CONFIRMATION ALONG WITH RELEVANT SUPPORTING DOCUMENTS TO EACH AND EVERY POINT OF **PRE-QUALIFICATION REQUIREMENT/PQR** FOR ALL ENQUIRY ITEMS. NONCOMPLIANCE OF THESE MAY LEAD TO REJECTION OF OFFER AS THESE ARE ESSENTIAL CONDITION FOR PARTICIPATING IN TENDER ENQUIRY.
3. KINDLY UPLOAD/ATTACH THE SPECIFICATION DETAILS/ CATALOGUE OF OFFERED ITEMS.
4. KINDLY **SUBMIT TECHNO-COMMERCIAL CHECKLIST** ALONG WITH YOUR OFFER.
5. KINDLY **SUBMIT PQR SHEET WITH SUPPORTING DOCUMENTS** ALONG WITH YOUR OFFER.
6. VENDOR TO CONFIRM TO PROVIDE TEST CERTIFICATES AS PER SPECIFIED MANUFACTURER'S STANDARD PRACTICE INCLUDING DOCUMENTS CONFORMING TO ENQUIRY MAKE/MODEL/PART NO. ALONG WITH THE MATERIAL.
7. IN CASE OF EQUIVALENTS OR UNDEFINED MAKE, VENDOR TO CONFIRM TO PROVIDE ORIGINAL MANUFACTURER'S TEST CERTIFICATES/DOCUMENTS OF ITEMS MEETING ENQUIRY REQUIREMENT.
8. VENDOR TO CONFIRM TO PROVIDE CERTIFICATE OF CONFORMANCE.
9. VENDOR TO CONFIRM TO PROVIDE IDENTIFICATION OF ALL ITEMS AND SUBSEQUENT IDENTIFICATION REPORTS.

**QUALIFYING CONDITIONS FOR CONDENSERS, RESISTORS, CAPACITORS, DIODES, UV EPROM ETC**

<b>Sl.</b>	<b>PQR Requirement</b>	<b>Vendor's Action</b>	<b>Vendor's Response (Yes / No / Remarks, if any)</b>
1.	<p>a) Vendor who has supplied military grade electrical items to defense establishments like OFB, ISRO, HAL, BEL, DABG-BHEL etc.</p> <p>Vendor to submit experience of supply of military grade electrical items to defense establishments. Documents like Unpriced PO copy, dispatch docs etc to be submitted.</p>	Vendor to confirm & submit	
	b) There shall be no pending rejections of the supplied PO.	Vendor to confirm	
2.	Who can manufacture or supply military grade items as per BHEL requirements.	Vendor to confirm	
3.	BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false/incorrect, the offer shall be rejected. Vendor to accept & confirm.	Vendor to accept/ confirm	
4.	Point numbers 1 to 3 are the Mandatory Qualification Requirements. Offers of vendors not meeting these requirements will NOT be considered.	Vendor to confirm	

**AGM/DPE**





**ENG.CHECK LIST-1 (2023-24-124\_DF135)**  
**FOR CONDENSERS, RESISTORS, CAPACITORS, DIODES, UV EPROM ETC**

<b>A)</b>	<b>Requirement</b>	<b>Vendor's Confirmation (Yes/No)</b>
1	Vendor to confirm to provide OEM or Authorized Dealer/Distributor Certificate of Conformance (OEM/AD-COC) or Traceability along with the supplies.	
2	Vendor to confirm that the items have been offered fully complying to BHEL's requirements.	







<b>B)</b>	<b>Vendor to fill the details for following items (For Metal Film Type Resistors &amp; Ceramic Capacitors refer separate technical sheet).</b>			
<b>SN</b>	<b>BHEL Mat.Code</b>	<b>Item Description</b>	<b>Vendor to specify whether the offered item is same model no. as specified by BHEL in item description or any equivalent/ alternate.</b>	<b>Vendor to specify Make/Model number of the offered item.</b>
9	W97051201050	DIODE 1N 198		
10	W97051201069	VERY FAST-ACTING FUSE, PART NO:251.125 OF LITTLEFUSE OR EQUIVALENT.		
11	W97051207032	DIODE(VARISTOR) Z21L221 OF I.R OR V140LA5P OF LITTLEFUSE OR EQUIVALENT.		
12	W97051207067	DIODE TYPE "PROTEK" PHP500		
13	W97053001024	M2732A-2-32K (4K X 8) UV ERASABLE PROM OF INTEL OR EQUIVALENT		
28	W97050601055	METALIZED POLYESTER CAPACITOR (CPM7-630V-1M-K OF FIABLE OR PM7-1UF +/-10%-630V OF EXXELIA OR ECWFG2J105K of PANASONIC OR EQUIVALANT)		
29	W97051207024	DIODE JAN1N 5555		
30	W97053902030	RESISTOR RE80G2R20		

**Note:** Vendor to also submit product catalogues/data sheet against the above items

**ENG.CHECK LIST-2 (2023-24-124\_DF135)**  
**FOR CONDENSERS, RESISTORS, CAPACITORS, DOIDES, UV EPROM ETC**

A)	Requirement			Vendor's Confirmation (Yes/No)		
1	Vendor to confirm to provide OEM or Authorized Dealer/Distributor Certificate of Conformance (OEM/AD-COC) or Traceability along with the supplies.					
2	Vendor to confirm that the items have been offered fully complying to BHEL's requirements.					
B)	Vendor to fill the details:					
S.N. (Indent)	BHEL MATCODE	DESCRIPTION(TECHNICAL REQUIREMENTS)	MODEL NOS. (NOTE: Model nos. are for reference only. Vendor to varyify parameters of offered items w.r.t parameters specified by BHEL. Vendor may also offer any suitable make/model number (meeting the Technical Requirements) beyond below mentioned model nos.	Picture is representational and for reference only	RESPONSE TYPE: Vendor to confirm to supply item meeting all requirements specified in DESCRIPTION(TECHNICAL REQUIREMENTS)	Vendor's Response
1	W97050601160	0.1 Micro-Farad Through Hole Ceramic Capacitor, Tolerance ±20% (Max), operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).	K104K15X7RF5TH5, K104K15X7RF5TL2 of Vishay /BC Components etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →	
2	W97050601179	0.22 Micro-Farad Through Hole Ceramic Capacitor , Tolerance ±20% (Max), operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).	K224K20X7RF5UH5 of Vishay C322C224K5R5TA7301 of Kemet etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →	
3	W97050601187	0.33 Micro-Farad Through Hole Ceramic Capacitor , Tolerance ±20% (Max), operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).	FG24X7R1H334KNT06, FA14X7R1H334KNU06 of TDK Corporation etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →	
4	W97050601195	0.47 Micro-Farad Through Hole Ceramic Capacitor , Maximum Tolerance ±20%, operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).	FG28X7R1H474KRT06 of TDK Corporation; K474K20X7RF5UH5 of Vishay etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →	
5	W97050601209	0.68 Micro-Farad Through Hole Ceramic Capacitor , Tolerance ±20% (Max), operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).	FA14X7R1H684KRU06 of TDK Corporation; K684K20X7RF5UH5 of Vishay etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →	
6	W97050601217	0.86 Micro-Farad Through Hole Ceramic Capacitor , Tolerance ±20% (Max), operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).	0.86 Micro-Farad Through Hole Ceramic Capacitor		Vendor to confirm that all parameters shall be as per the specified technical requirements →	

7	W97050601225	<b>1 Micro-Farad Through Hole Ceramic Capacitor , Tolerance ±20% (Max), operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).</b>	C330C105K5R5TA7301 of Kemet, FG28X5R1H105KRT06 of TDK Corporation etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
8	W97050601233	<b>0.82 Micro-Farad Through Hole Ceramic Capacitor , Tolerance ±20% (Max), operating temperature -25 to +125 deg.C, Voltage rating 50V (MINIMUM).</b>	C330C824M5U5TA, C330C824K5R5TA, CK06BX824K of Kemet etc		Vendor to confirm that all parameters shall be as per the specified technical requirements →
14	W97053902323	<b>10-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	MFR-25FRF52-10R of YAGEO; RN60D10R0FRE6 of Vishay; MFS1/4DCT52R10R0F, MF1/4CCT52R10R0F of KOA Speer etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
15	W97053902331	<b>100-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	CMF50100R00FHCB, RN60C1000FRE6 of Vishay; MFR-25FTE52-100R of YAGEO etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
16	W97053902340	<b>1 k-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	CMF501K0000FHEA; RN60C1001FB14 of Vishay; LR0204F1K0 of TE Connectivity etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
17	W97053902358	<b>10 k-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	CMF5010K000FHEK, RN60D1002FB14 of Vishay etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
18	W97053902366	<b>30.1 k-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	CMF5030K100FHCB, RN60D3012FB14; RN60D3012FRE6 of Vishay etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
19	W97053902374	<b>36.5 k-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	RN60D3652FB14, RN60D3652FRE6 of Vishay etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
20	W97053902382	<b>100 k-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	LR0204F100K of TE Connectivity; RN60D1003FB14 of Vishay etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
21	W97053902390	<b>470 k-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	RN60D4703FRE6 of Vishay, H8470KFZA of TE Connectivity etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →

22	W97053902404	<b>866 k-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	RN60D8663FB14 of Vishay; MF1/4DC8663F of KOA Speer etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
23	W97053902412	<b>1M-OHM Through Hole Resistance (0.25W) , Metal film type, Maximum Tolerance 5%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 200ppm/deg.C (Max)</b>	RN60D1004FRE6, RN60D1004FB14 of Vishay etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
24	W97053902420	<b>1.2 M-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	MF1/4DCT52R1204F, MF1/4DLT52R1204F of KOA Speer etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
25	W97053902439	<b>2.2M-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	MFR-25FRF52-2M2, MFR-25FBF52-2M2 of Yageo etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
26	W97053902447	<b>3.6 M-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	MFR-25FBF52-3M6 of Yageo etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →
27	W97053902455	<b>3.9M-OHM Through Hole Resistance, 0.25W, Metal film type, Maximum Tolerance 1%, Operating Temp. -55 DEG.C TO +155 DEG.C. Temperature Coefficient 100ppm/deg.C (Max)</b>	MFR-25FTE52-3M9 of Yageo etc.		Vendor to confirm that all parameters shall be as per the specified technical requirements →

**TECHNICAL PARAMETERS CHECK LIST**  
**DATA VALUES TO BE FILLED AND CONFIRMED BY VENDOR**

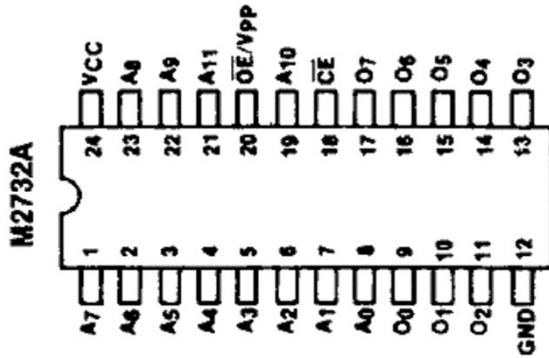
**BHEL MATERIAL CODE**      **W97051207032**  
**BHEL PART NUMBER**      **840DZ0106**  
**ITEM DESCRIPTION**      **DIODE(VARISTOR) Z21L221 OF I.R**  
**OR V140LA5P OF LITTLEFUSE OR**  
**EQUIVALENT.**

SN.	PARAMETERS / CODE	VALUES	UNIT	RESPONSE TYPE	VENDOR RESPONSE
1	COMMERCIAL CODE	(VENDOR TO SPECIFY)E.G. DIODE(VARISTOR) Z21L221 OF I.R OR V140LA5P OF LITTLEFUSE	-	To input      ➔	
2	PRODUCT	Metal Oxide Varistor	-	To confirm      ➔	
3	VARISTOR VOLTAGE	220	V	To confirm      ➔	
4	DATASHEET	Attached	Y/N	To confirm      ➔	
5	SURGE ABSORBITIVE ENERGY	22	J	To confirm      ➔	
6	CONTINUOUS RATING AC	133 to 140 Volt rms	V_rms	To confirm      ➔	
7	CONTINUOUS RATING DC	178 to 180 Volt DC	V_dc	To confirm      ➔	
8	LIMITED VOLTAGE RATIO	1.62	-	To confirm      ➔	
9	MAX CLAMPING VOLTAGE	360V (APPROX)	-	To confirm      ➔	
10	CERTIFICATION	OEM/AD-COC Certificate of Conformance (OEM/AD COC) or traceability	Y/N	To confirm      ➔	

**VENDOR REMARKS: (specify model no. ; OEM name; any deviations etc.. )**

**TECHNICAL PARAMETERS CHECK LIST**  
**DATA VALUES TO BE FILLED AND CONFIRMED BY VENDOR**

ITEM CODE                    W97053001024  
ITEM NAME                   M2732A-2-32K (4K X 8) UV ERASABLE PROM  
ITEM PART NO                852ME0152



**Pin Names**

A <sub>0</sub> -A <sub>11</sub>	Addresses
$\overline{\text{CE}}$	Chip Enable
$\overline{\text{OE}}$	Output Enable
O <sub>0</sub> -O <sub>7</sub>	Outputs

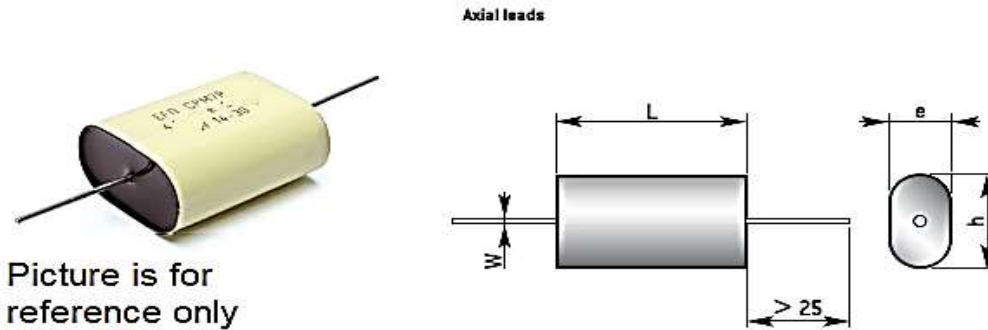
SN.	PARAMETERS	VALUES	UNIT	RESPONSE TYPE	VENDOR RESPONSE
1	EPROM MODEL	M2732A	-	To confirm	→
2	Maximum Access Time	250	ns	Input Value	→
3	Compatible to High Speed	5	MHZ	Input Value	→
4	Temperature range	- 55 °C to + 125 °C		Input Value	→
5	Low standby Current (Max.)	35	mA	Input Value	→
6	Supply Voltage	5 ( +/- 10% )	V	Input Value	→
7	DATASHEET	Attached	Y/N	To confirm	→
8	CERTIFICATION	OEM/AD-COC Certificate of Conformance (OEM/AD COC) or traceability	Y/N	To confirm	→

**9. VENDOR REMARKS: (specify model no. ; OEM name; any deviations etc.. )**

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**TECHNICAL PARAMETERS CHECK LIST**  
**DATA VALUES TO BE FILLED AND CONFIRMED BY VENDOR**

ITEM CODE W97050601055  
ITEM NAME METALIZED POLYESTER  
CAPACITOR 1 MICRO-FARAD,  
630V, 10% TOLER  
ANCE. MODEL:CPM7-630V-1M-  
K OF FIABLE OR PM7-1UF +/-  
10%-630V OF  
EXXELIA OR ERQUIVALENT  
ITEM PART NO 830FI0105



SN.	PARAMETERS	VALUES	UNIT	RESPONSE TYPE	VENDOR RESPONSE
1	TYPE	METALIZED POLYESTER CAPACITOR (CPM7-630V-1M-K OF FIABLE OR PM7-1UF +/-10%-630V OF EXXELIA OR ECWFG2J105K of PANASONIC OR EQUIVALANT)	--	To input →	
2	CAPACITANCE	1	MICRO-FARAD	To confirm →	
3	VOLTAGE	630	Volt(DC)	Input Value →	
4	TOLERANCE	10	%	Input Value →	
5	LENGTH(L)	31	MM	Input Value →	
6	HEIGHT(H)	24	MM	Input Value →	
7	THICKNESS ( E )	14.5	MM	Input Value →	
8	MAKE	-	-	Input Value →	
9	MODEL NO	-	-	Input Value →	
10. VENDOR REMARKS: (specify model no. ; OEM name; any deviations etc.. )					

## **TECHNO-COMMERCIAL CHECKLIST**

SL. NO.	TERMS & CONDITION	VENDOR CONFIRMATION /REMARKS / REPLY
<b>TENDER DETAILS</b>		
1	BIDDER NAME	
2	GEM BID NO	
<b>QUALITY &amp; TECHNICAL REQUIREMENTS</b>		
3	VENDORS TO CONFIRM TO PROVIDE POINT WISE REPLY/ CONFIRMATION ALONG WITH RELEVANT SUPPORTING DOCUMENTS TO EACH AND EVERY POINT OF <b>PRE-QUALIFICATION REQUIREMENT/PQR</b> FOR ALL ENQUIRY ITEMS. NONCOMPLIANCE OF THESE MAY LEAD TO REJECTION OF OFFER AS THESE ARE ESSENTIAL CONDITION FOR PARTICIPATING IN TENDER ENQUIRY	
4	VENDOR TO CONFIRM TO PROVIDE TEST CERTIFICATES AS PER SPECIFIED MANUFACTURER'S STANDARD PRACTICE INCLUDING DOCUMENTS CONFORMING TO ENQUIRY MAKE/MODEL/PART NO. ALONG WITH THE MATERIAL	
5	IN CASE OF EQUIVALENTS OR UNDEFINED MAKE, VENDOR TO CONFIRM TO PROVIDE ORIGINAL MANUFACTURER'S TEST CERTIFICATES/DOCUMENTS OF ITEMS MEETING ENQUIRY REQUIREMENT.	
6	VENDOR TO CONFIRM TO PROVIDE CERTIFICATE OF CONFORMANCE.	
7	VENDOR TO CONFIRM TO PROVIDE IDENTIFICATION OF ALL ITEMS AND SUBSEQUENT IDENTIFICATION REPORTS.	
<b>COMMERICAL REMARKS</b>		
8	ITEMS TO BE SUPPLIED AS PER ITEM DESCRIPTION/ SPECIFICATION/ STANDARD.	
9	<b>BREACH OF CONTRACT CLAUSE:.</b> IN CASE OF BREACH OF CONTRACT, WHEREVER THE VALUE OF SECURITY INSTRUMENTS LIKE PERFORMANCE BANK GUARANTEE AVAILABLE WITH BHEL AGAINST THE SAID CONTRACT IS ATLEAST 10% OF THE CONTRACT VALUE, THE SAME BE ENCASHED. IN CASE THE VALUE OF THE SECURITY INSTRUMENTS AVAILABLE IS LESS THAN 10% OF THE CONTRACT VALUE, THE BALANCE AMOUNT BE RECOVERED FROM OTHER FINANCIAL REMEDIES (I.E. AVAILABLE BILLS OF THE CONTRACTOR, RETENTION AMOUNT, ETC. WITH BHEL) OR LEGAL REMEDIES BE PURSUED.	
10	<b>ACTION AGAINST BIDDERS / VENDOR / SUPPLIER / CONTRACTOR IN CASE OF DEFAULT:</b> IN ORDER TO PROTECT THE COMMERCIAL INTERESTS OF BHEL, BHEL SHALL TAKE ACTION AGAINST SUPPLIES / CONTRACTORS BY WAY OF SUSPENSION OF BUSINESS DEALINGS, WHO EITHER FAIL TO PERFORM OR ARE IN DEFAULT WITHOUT ANY REASONABLE CAUSE, CAUSE LOSS OF BUSINESS/ MONEY/ REPUTATION, INDULGE IN MALPRACTICES, CHEATING, BRIBERY, FRAUD OR ANY OTHER MISCONDUCT OR FORMATION OF CARTELS SO AS TO INFLUENCE THE BIDDING PROCESS OR INFLUENCE THE PRICE ETC.SUSPENSION OF BUSINESS DEALINGS COULD BE IN THE FORM OF "HOLD" OR "BANNING" A SUPPLIER/ CONTRACTOR OR A BIDDER AND SHALL BE AS PER "GUIDELINES FOR SUSPENSION OF BUSINESS DEALINGS WITH SUPPLIERS/ CONTRACTORS" AVAILABLE AT BHEL'S WEBSITE " <a href="https://www.bhel.com/guidelines-suspension-business-dealings-supplierscontractors">https://www.bhel.com/guidelines-suspension-business-dealings-supplierscontractors</a> "	
11	REST GENERAL TERMS AND CONDITIONS AS PER GeM	

1. ALL VENDORS TO PROVIDE POINT WISE REPLY/CONFIRMATION ALONG WITH RELEVANT SUPPORTING DOCUMENTS TO EACH AND EVERY POINT OF **PRE-QUALIFICATION REQUIREMENT/PQR** FOR ALL ENQUIRY ITEMS. NONCOMPLIANCE OF THESE MAY LEAD TO REJECTION OF OFFER AS THESE ARE ESSENTIAL CONDITION FOR PARTICIPATING IN TENDER ENQUIRY.
2. EARLY DELIVERY ACCEPTABLE.
3. ALL VENDORS TO PROVIDE POINT WISE REPLY/CONFIRMATION ALONG WITH RELEVANT SUPPORTING DOCUMENTS TO EACH AND EVERY POINT OF **PRE-QUALIFICATION REQUIREMENT/PQR** FOR ALL ENQUIRY ITEMS. NONCOMPLIANCE OF THESE MAY LEAD TO REJECTION OF OFFER AS THESE ARE ESSENTIAL CONDITION FOR PARTICIPATING IN TENDER ENQUIRY.
4. KINDLY UPLOAD/ATTACH THE SPECIFICATION DETAILS/ CATALOGUE OF OFFERED ITEMS.
5. KINDLY **SUBMIT TECHNO-COMMERCIAL CHECKLIST** ALONG WITH YOUR OFFER.
6. KINDLY **SUBMIT PQR SHEET WITH SUPPORTING DOCUMENTS** ALONG WITH YOUR OFFER.
7. VENDOR TO PROVIDE TEST CERTIFICATES AS PER SPECIFIED MANUFACTURER'S STANDARD PRACTICE INCLUDING DOCUMENTS CONFORMING TO ENQUIRY MAKE/MODEL/PART NO. ALONG WITH THE MATERIAL.
8. IN CASE OF EQUIVALENTS OR UNDEFINED MAKE, VENDOR TO CONFIRM TO PROVIDE ORIGINAL MANUFACTURER'S TEST CERTIFICATES/DOCUMENTS OF ITEMS MEETING ENQUIRY REQUIREMENT.
9. VENDOR TO PROVIDE CERTIFICATE OF CONFORMANCE.
10. VENDOR TO PROVIDE IDENTIFICATION OF ALL ITEMS AND SUBSEQUENT IDENTIFICATION REPORTS.
11. IF PRICE QUOTED BY MSE VENDOR IS WITHIN THE PRICE BAND OF L1+15%, THEN 25% QUANTITY OF THE RESPECTIVE ITEM (ROUNDED OFF TO NEAREST NUMBER) SHALL BE OFFERED TO MSE VENDOR SUBJECT TO MATCHING THE L1 PRICES.  
IF THE QUANTITY REQUIRED IS 1 NUMBER (AS SUCH NON-DIVISIBLE), MSE QUOTING WITH IN PRICE PREFERENCE OF L1+15% SHALL BE OFFERED 100% QUANTITY SUBJECT TO MATCHING THE L1 PRICES
12. MSE/MII: THE SUPPLIER NEEDS TO SUBMIT/UPDATE MSE/MII CREDENTIALS ON GEM PORTAL DURING PROFILE UPDATION/ OFFER SUBMISSION STAGE. THE MSE DATA SUBMITTED IS CROSS VERIFIED BY GEM WITH GOVT. OF INDIA UDYAM/NSIC DATABASE THROUGH API INTEGRATION ON REAL TIME BASIS AND FOR MII, A SELF DECLARATION IS BEING GIVEN AND AUTHENTICATED BY AADHAR OTP. IF THE SELLER FAILS TO CLAIM MSE/MII PROVISION ON GEM PORTAL AT PROFILE UPDATION/BID SUBMISSION STAGE, THE SAID SELLER WILL BECOME INELIGIBLE FOR GETTING THE MSE/MII BENEFITS FOR THAT BID AUTOMATICALLY. THE VENDOR CAN ALWAYS CONTACT THE GEM HELPDESK, IN CASE OF ANY ISSUES.
13. THE PRICE QUOTE BY BIDDER SHOULD BE INCLUSIVE OF GST & SHOULD BE ON BHEL HEEP HARIDWAR STORES BASIS.
14. BIDDER'S OFFER IS LIABLE TO BE REJECTED IF THEY DON'T UPLOAD ANY OF THE CERTIFICATES / DOCUMENTS SOUGHT IN THE BID DOCUMENT, ATC AND CORRIGENDUM IF ANY.

**15. BREACH OF CONTRACT CLAUSE:**

IN CASE OF BREACH OF CONTRACT, WHEREVER THE VALUE OF SECURITY INSTRUMENTS LIKE PERFORMANCE BANK GUARANTEE AVAILABLE WITH BHEL AGAINST THE SAID CONTRACT IS ATLEAST 10% OF THE CONTRACT VALUE, THE SAME BE ENCASHED. IN CASE THE VALUE OF THE SECURITY INSTRUMENTS AVAILABLE IS LESS THAN 10% OF THE CONTRACT VALUE, THE BALANCE AMOUNT BE RECOVERED FROM OTHER FINANCIAL REMEDIES (I.E. AVAILABLE BILLS OF THE CONTRACTOR, RETENTION AMOUNT, ETC. WITH BHEL) OR LEGAL REMEDIES BE PURSUED.

**16. ACTION AGAINST BIDDERS / VENDOR / SUPPLIER / CONTRACTOR IN CASE OF DEFAULT:**

IN ORDER TO PROTECT THE COMMERCIAL INTERESTS OF BHEL, BHEL SHALL TAKE ACTION AGAINST SUPPLIES / CONTRACTORS BY WAY OF SUSPENSION OF BUSINESS DEALINGS, WHO EITHER FAIL TO PERFORM OR ARE IN DEFAULT WITHOUT ANY REASONABLE CAUSE, CAUSE LOSS OF BUSINESS/ MONEY/ REPUTATION, INDULGE IN MALPRACTICES, CHEATING, BRIBERY, FRAUD OR ANY OTHER MISCONDUCT OR FORMATION OF CARTELS SO AS TO INFLUENCE THE BIDDING PROCESS OR INFLUENCE THE PRICE ETC. SUSPENSION OF BUSINESS DEALINGS COULD BE IN THE FORM OF "HOLD" OR "BANNING" A SUPPLIER/ CONTRACTOR OR A BIDDER AND SHALL BE AS PER "GUIDELINES FOR SUSPENSION OF BUSINESS DEALINGS WITH SUPPLIERS/ CONTRACTORS" AVAILABLE AT BHEL'S WEBSITE <https://www.bhel.com/guidelines-suspension-business-dealings-supplierscontractors>

17. BIDDERS ARE ADVISED TO CHECK APPLICABLE GST ON THEIR OWN BEFORE QUOTING. BUYER WILL NOT TAKE ANY RESPONSIBILITY IN THIS REGARDS. GST REIMBURSEMENT WILL BE AS PER ACTUALS OR AS PER APPLICABLE RATES (WHICHEVER IS LOWER), SUBJECT TO THE MAXIMUM OF QUOTED GST %.

18. BIDDER SHALL SUBMIT THE FOLLOWING DOCUMENTS ALONG WITH THEIR BID FOR VENDOR CODE CREATION:

**A. COPY OF PAN CARD B. COPY OF GSTIN C. COPY OF MSE CERIFICATE**

19. DEDICATED /TOLL FREE TELEPHONE NO. FOR SERVICE SUPPORT: BIDDER/OEM MUST HAVE DEDICATED/TOLL FREE TELEPHONE NO. FOR SERVICE SUPPORT.

20. DATA SHEET OF THE PRODUCT(S) OFFERED IN THE BID, ARE TO BE UPLOADED ALONG WITH THE BID DOCUMENTS. BUYERS CAN MATCH AND VERIFY THE DATA SHEET WITH THE PRODUCT SPECIFICATIONS OFFERED. IN CASE OF ANY UNEXPLAINED MISMATCH OF TECHNICAL PARAMETERS, THE BID IS LIABLE FOR REJECTION.

21. SCOPE OF SUPPLY (BID PRICE TO INCLUDE ALL COST COMPONENTS): ONLY SUPPLY OF GOODS.

22. PRODUCTS SUPPLIED SHALL BE NONTOXIC AND HARMLESS TO HEALTH. IN THE CASE OF TOXIC MATERIALS, MATERIAL SAFETY DATA SHEET MAY BE FURNISHED ALONG WITH THE MATERIAL.

23. WHILE GENERATING INVOICE IN GEM PORTAL, THE SELLER MUST UPLOAD SCANNED COPY OF GST INVOICE AND THE SCREENSHOT OF GST PORTAL CONFIRMING PAYMENT OF GST.

**24. PAYMENT TERMS SHALL BE AS PER FOLLOWINGS:**

- a) **FOR NON-MSES BIDDER:** 100% payment along with taxes, freight & insurance will be made after receipt and acceptance of material and within 90 days from the date of invoice subject to submission of non-discrepant documents within 15 days of supply as per terms and conditions of Purchase Order (THIS IS IN SUPERSESSION OF 10 DAYS' TIME AS PROVIDED IN CLAUSE 12 OF GEM GTC).
- b) **FOR MSES BIDDER:** For MSEs (covered under MSME Act) which are registered and periodically renewed with BHEL, the payment will be made within 45 days or as prescribed in the relevant act. Benefits of MSE (such as EMD Waiver, Tender fee exemption, Price preference, Payment preference etc.) will be given only to those MSE Vendors who are manufacturers of offered items against the NIT. No MSE benefits shall be provided to Agents / Stockists /Dealers / Traders etc. for the items offered but not manufactured by themselves."
- c) **FOR MEDIUM ENTERPRISES:** 100% payment along with taxes, freight & insurance will be made after receipt and acceptance of material and within 60 days from the date of invoice subject to submission of non-discrepant documents within 15 days of supply as per terms and conditions of Purchase Order.

- d)** Please note that vendor to adhere to the payment terms as per above. No deviation in payment terms shall be accepted. Vendor to submit their offer accordingly.

**MAKE IN INDIA SELF CERTIFICATION**

As per Government Public procurement order no. P-45021/2/2017-BE-II dt.15.06.2017 & P45021/2/2017-PP(BE-II) dated 28.05.2018,29.5.2019, 04.6.2020 and amendment dated 16.09.2020, it is hereby certifying that we

.....  
..... (supplier name) are .....(Class-I/Class-II)  
local supplier and will meet the requirement of minimum local content of .....  
(50%/20%) as defined in public procurement order dated 04.6.2020 for material against Enquiry no.  
..... Details of  
location at which local value addition will be made is as follows: -

.....  
.....  
.....

We also understand, false declarations will be in breach of the code of integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the general financial rules along with such other actions as may be permissible under law.

**Note:**

As per office order P-45021/102/2019-BE-II-Part (1) (E-50310) Dated 04/03/2021, Bidders can't claim itself as "Class-I local supplier/Class-II local suppliers" by claiming the service such as transportation, insurance, installation, commissioning, training & after sales service support like AMC/CMC etc. as local value addition. Bidder offering imported product will fall under the category of Non-Local supplier.