



PROTEK DEVICES[®]

.....Engineered solutions for the transient environment

HSMC

Replacement
Guide for
Military TVS
Diodes

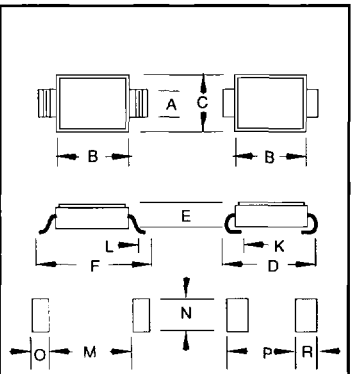
MILITARY TVS CONVERSION

1500 WATT D0-13 TVS TO HSMC SURFACE MOUNT

JEDEC PART NUMBER	WORKING VOLTAGE	PROTEK PART NUMBER	WORKING VOLTAGE	JEDEC PART NUMBER	WORKING VOLTAGE	PROTEK PART NUMBER	WORKING VOLTAGE
1N5555	30.5	HSMC G 30A	30.0	1N6042A	11.0	HSMC G 11CA	11.0
1N5556	40.3	HSMC G 40A	40.0	1N6043A	12.0	HSMC G 12CA	12.0
1N5557	49.0	HSMC G 48A	48.0	1N6044A	13.0	HSMC G 13CA	13.0
1N5558	175.0	HSMC G 170A	170.0	1N6045A	15.0	HSMC G 15CA	15.0
1N5629A	5.8	HSMC G 6A	6.0	1N6046A	17.0	HSMC G 17CA	17.0
1N5631A	7.0	HSMC G 7A	7.0	1N6047A	18.0	HSMC G 18CA	18.0
1N5632A	7.8	HSMC G 8A	8.0	1N6048A	20.0	HSMC G 20CA	20.0
1N5633A	8.6	HSMC G 8.5A	8.5	1N6049A	22.0	HSMC G 22CA	22.0
1N5634A	9.4	HSMC G 9.0A	9.0	1N6050A	25.0	HSMC G 24CA	24.0
1N5635A	10.2	HSMC G 10A	10.0	1N6051A	28.0	HSMC G 28CA	28.0
1N5636A	11.1	HSMC G 11A	11.0	1N6052A	30.0	HSMC G 30CA	30.0
1N5637A	12.8	HSMC G 13A	13.0	1N6053A	33.0	HSMC G 33CA	33.0
1N5638A	13.6	HSMC G 14A	14.0	1N6054A	36.0	HSMC G 36CA	36.0
1N5639A	15.3	HSMC G 15A	15.0	1N6055A	40.0	HSMC G 40CA	40.0
1N5640A	17.1	HSMC G 16A	16.0	1N6056A	43.0	HSMC G 43CA	43.0
1N5641A	18.8	HSMC G 18A	18.0	1N6057A	47.0	HSMC G 48CA	48.0
1N5642A	20.5	HSMC G 20A	20.0	1N6058A	53.0	HSMC G 53CA	53.0
1N5644A	25.6	HSMC G 26A	26.0	1N6059A	58.0	HSMC G 58CA	58.0
1N5645A	28.2	HSMC G 28A	28.0	1N6061A	70.0	HSMC G 70CA	70.0
1N5646A	30.8	HSMC G 30A	30.0	1N6062A	75.0	HSMC G 78CA	78.0
1N5647A	33.3	HSMC G 33A	33.0	1N6063A	82.0	HSMC G 85CA	85.0
1N5648A	36.8	HSMC G 36A	36.0	1N6065A	100.0	HSMC G 100CA	100.0
1N5649A	40.2	HSMC G 40A	40.0	1N6067A	128.0	HSMC G 130CA	130.0
1N5650A	43.6	HSMC G 43A	43.0	1N6068A	145.0	HSMC G 145CA	145.0
1N5651A	47.8	HSMC G 48A	48.0	1N6069A	150.0	HSMC G 150CA	150.0
1N5652A	53.0	HSMC G 53A	53.0	1N6071A	170.0	HSMC G 170CA	170.0
1N5653A	58.1	HSMC G 58A	58.0	1N6072A	185.0	HSMC G 185CA	185.0
1N5654A	64.1	HSMC G 64A	64.0				
1N5655A	70.1	HSMC G 70A	70.0	1N6356	5.0	HSMC G 5A	5.0
1N5656A	77.8	HSMC G 78A	78.0	1N6357	8.0	HSMC G 8A	8.0
1N5657A	85.5	HSMC G 85A	85.0	1N6358	10.0	HSMC G 10A	10.0
1N5658A	94.0	HSMC G 95A	95.0	1N6359	12.0	HSMC G 12A	12.0
1N5659A	102.0	HSMC G 100A	100.0	1N6360	15.0	HSMC G 15A	15.0
1N5660A	111.0	HSMC G 110A	110.0	1N6361	18.0	HSMC G 18A	18.0
1N5661A	128.0	HSMC G 130A	130.0	1N6362	22.0	HSMC G 22A	22.0
1N5662A	136.0	HSMC G 135A	135.0	1N6363	36.0	HSMC G 36A	36.0
1N5664A	154.0	HSMC G 150A	150.0	1N6364	45.0	HSMC G 43A	43.0
1N5665A	171.0	HSMC G 170A	170.0	1N6365	8.0	HSMC G 8.5CA	8.5
1N5907	5.0	HSMC G 5A	5.0	1N6366	10.0	HSMC G 10CA	10.0
1N6036A	6.0	HSMC G 6.0CA	6.0	1N6367	12.0	HSMC G 12CA	12.0
1N6037A	7.0	HSMC G 7.0CA	7.0	1N6368	15.0	HSMC G 15CA	15.0
1N6038A	7.5	HSMC G 7.5CA	7.5	1N6369	18.0	HSMC G 18CA	18.0
1N6039A	8.5	HSMC G 8.5CA	8.5	1N6370	22.0	HSMC G 22CA	22.0
1N6040A	9.0	HSMC G 9.0CA	9.0	1N6371	36.0	HSMC G 36CA	36.0
1N6041A	10.0	HSMC G 10CA	10.0	1N6372	45.0	HSMC G 43CA	43.0

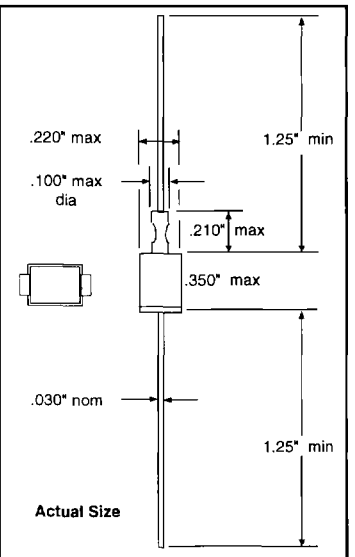


Actual Size



DIMENSIONS

	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.108	0.128	2.740	3.250
B	0.260	0.280	6.600	7.110
C	0.225	0.245	5.720	6.220
D	0.330	0.350	8.380	8.890
E	0.087	0.108	2.210	2.670
F	0.380	0.400	9.650	10.160
K	0.015	0.035	6.100	0.810
L	0.013	0.035	0.330	0.890
M	0.310	nom.	7.870	nom.
N	0.130	nom.	3.300	nom.
O	0.050	nom.	1.270	nom.
P	0.270	nom.	6.850	nom.
R	0.070	nom.	1.770	nom.



Actual Size

Cross Reference List continues on 2nd page.

PROTS001

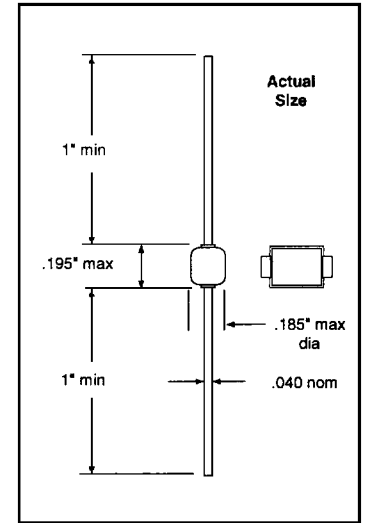
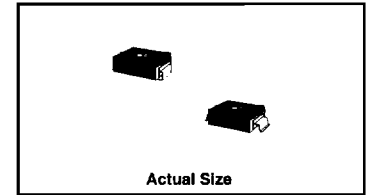


MILITARY TVS CONVERSION

1500 WATT GLASS HERMETIC TVS TO HSMC SURFACE MOUNT

JEDEC PART NUMBER	WORKING VOLTAGE	PROTEK PART NUMBER	WORKING VOLTAGE	JEDEC PART NUMBER	WORKING VOLTAGE	PROTEK PART NUMBER	WORKING VOLTAGE
1N5610	30.5	HSMC G 30A	30.0	1N6157A	32.7	HSMC G 33CA	33.0
1N5611	40.3	HSMC G 40A	40.0	1N6158A	35.8	HSMC G 36CA	36.0
1N5612	49.0	HSMC G 48A	48.0	1N6159A	38.8	HSMC G 40CA	40.0
1N5613	175.0	HSMC G 170A	170.0	1N6160A	42.6	HSMC G 43CA	43.0
1N6139A	5.7	HSMC G 6.0CA	6.0	1N6161A	47.1	HSMC G 48CA	48.0
1N6140A	6.2	HSMC G 6.5CA	6.5	1N6162A	51.7	HSMC G 53CA	53.0
1N6141A	6.9	HSMC G 7.0CA	7.0	1N6163A	56.0	HSMC G 58CA	58.0
1N6142A	7.6	HSMC G 7.5CA	7.5	1N6165A	69.2	HSMC G 70CA	70.0
1N6143A	8.4	HSMC G 8.5CA	8.5	1N6166A	76.0	HSMC G 78CA	78.0
1N6144A	9.1	HSMC G 9.0CA	9.0	1N6167A	86.6	HSMC G 85CA	85.0
1N6145A	9.9	HSMC G 10CA	10.0	1N6169A	98.8	HSMC G 100CA	100.0
1N6146A	11.4	HSMC G 11CA	11.0	1N6172A	136.8	HSMC G 130CA	130.0
1N6147A	12.2	HSMC G 12CA	12.0	1N6173A	152.0	HSMC G 150CA	150.0
1N6148A	13.7	HSMC G 14CA	14.0				
1N6149A	15.2	HSMC G 15CA	15.0	1N6469	5.0	HSMC G 5A	5.0
1N6150A	16.7	HSMC G 17CA	17.0	1N6470	6.0	HSMC G 6A	6.0
1N6151A	18.2	HSMC G 18CA	18.0	1N6471	12.0	HSMC G 12A	12.0
1N6152A	20.6	HSMC G 20CA	20.0	1N6472	15.0	HSMC G 15A	15.0
1N6153A	22.8	HSMC G 22CA	22.0	1N6473	24.0	HSMC G 24A	24.0
1N6154A	25.1	HSMC G 24CA	24.0	1N6474	30.5	HSMC G 30A	30.0
1N6155A	27.4	HSMC G 28CA	28.0	1N6475	40.3	HSMC G 40A	40.0
1N6156A	29.7	HSMC G 30CA	30.0	1N6476	51.6	HSMC G 53A	53.0

List includes preferred voltages only. Contact factory for other voltages



GENERAL COMMENTS

DESCRIPTION

The HSMC TVS series is a family of premium hermetically sealed, surface mount silicon transient voltage suppressors. This series was designed for aerospace applications where space is at a premium and the system must operate over a broad range of temperature and environmental conditions.

The HSMC Series meets and/or exceeds the requirements of MIL-S-19500 and MIL-STD-750. The HSMC surface mount series offers an ideal solution for new design or replacement of older axial leaded TVS diodes. Contact the factory for our HSMC Replacement Guide to MIL-S-19500/434, /500, /507, /516 and /552.

ProTek Devices offers the HSMC surface mount series screened for military and aerospace environmental requirements in accordance to MIL-S-19500. Standard screening consists of 100% JANTX equivalent level testing per MIL-S-19500/434, 500, or /507, paragraph 4.3. For ordering these options, use the following suffix:

- H1 - 100% Screening.
- H2 - 100% Screening and Group B Lot Testing.
- H3 - 100% Screening and both Group B and Group C Lot Testing.