

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Low Switching Losses and High Efficiency
- Low Reverse Leakage
- Ultrafast Recovery Time
- Planar Structure Die and Soft Recovery Characteristics

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Maximum Thermal Resistance: 2°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS540A	MURS540A	400V	280V	400V

Electrical Characteristics @ 25°C Unless Otherwise Specified

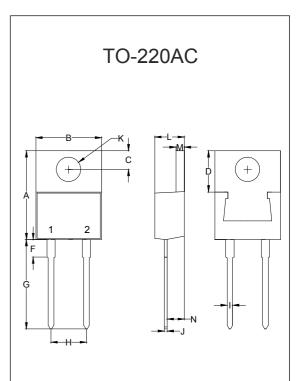
Average Rectified Forward Current	I _{F(AV)}	5A	T _C =160°C	;
Peak Forward Surge Current	I _{FSM}	70A	8.3ms,Hal	f Sine
Instantaneous Forward Voltage	V _F	1.08V(Typ) 1.25V(Max) 1.05V(Max)	$I_F=5A;$ T $I_F=5A;$ T $I_F=5A;$ T	_J=25°C
Maximum Reverse Current At Rated DC Blocking Voltage	current At Rated DC			
Typical Junction Capacitance	CJ	35pF	Measured 1.0MHz, \	
Reverse Recovery	t _{rr}	25ns(Typ.) 35ns(Max.)	I _F =0.5A; I _R =1.0A; I _{RR} =0.25A	
Time		30ns(Typ.) 46ns(Typ.)	T _J =25°C T _J =125°C	1 -5 ^
Peak recovery current	I _{RRM}	3.1A(Typ.) 5.1A(Typ.)	T _J =25°C T _J =125°C	I _F =5A di _F /dt=-200A/µs V _R =200 V
Reverse recovery charge	Q _{rr}	47nC(Typ.) 120nC(Typ.)	T _J =25°C T _J =125°C	

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

Internal Structure



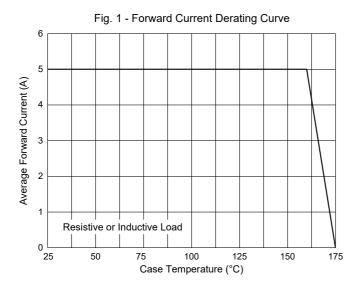
5 Amp FRED Rectifiers 400 Volts

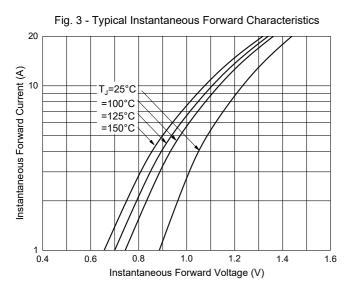


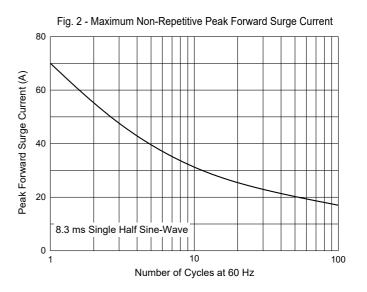
DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.560	0.625	14.22	15.88		
В	0.380	0.420	9.65	10.67		
С	0.100	0.135	2.54	3.43		
D	0.230	0.270	5.84	6.86		
F		0.250		6.35		
G	0.500	0.580	12.70	14.73		
Н	0.190	0.210	4.83	5.33		
I	0.020	0.045	0.51	1.14		
J	0.012	0.025	0.30	0.64		
K	0.139	0.161	3.53	4.09	Ф	
L	0.140	0.190	3.56	4.83		
M	0.045	0.055	1.14	1.40		
N	0.080	0.115	2.03	2.92		

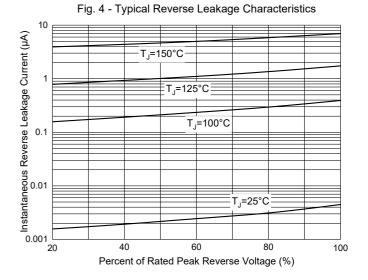


Curve Characteristics









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Ordering Information

Device	Packing	
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton	

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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