

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Super Fast Switching For High Efficiency
- High Junction Temperature Capability

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance : 3.0°C/W Junction to Case

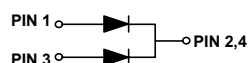
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURD1020CT	MURD1020CT	200V	140V	200V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current	$I_{F(AV)}$	10A	$T_C=130^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.95V 0.86V(Typ.) 0.82V	$I_F=5\text{A}; T_A=25^{\circ}\text{C}$ $I_F=5\text{A}; T_A=125^{\circ}\text{C}$
Maximum Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 50 μA	$T_A=25^{\circ}\text{C}$ $T_A=125^{\circ}\text{C}$
Maximum Reverse Recovery Time	t_{rr}	25ns	$I_F=0.5\text{A}; I_R=1.0\text{A}; I_{RR}=0.25\text{A}$

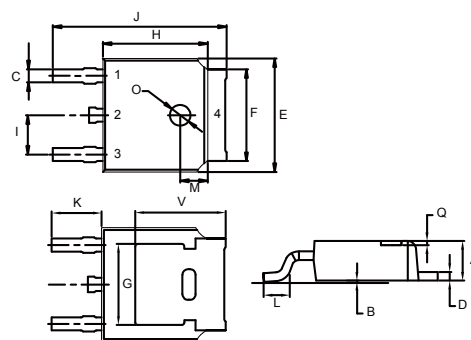
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex Notes 7a.

Internal Structure



10 Amp Super Fast Rectifiers 200 Volts

DPAK(TO-252)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.087	0.094	2.20	2.40	
B	0.000	0.005	0.00	0.13	
C	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
E	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.190		4.83		TYP.
H	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.114		2.90		TYP.
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		TYP.
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		TYP.

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

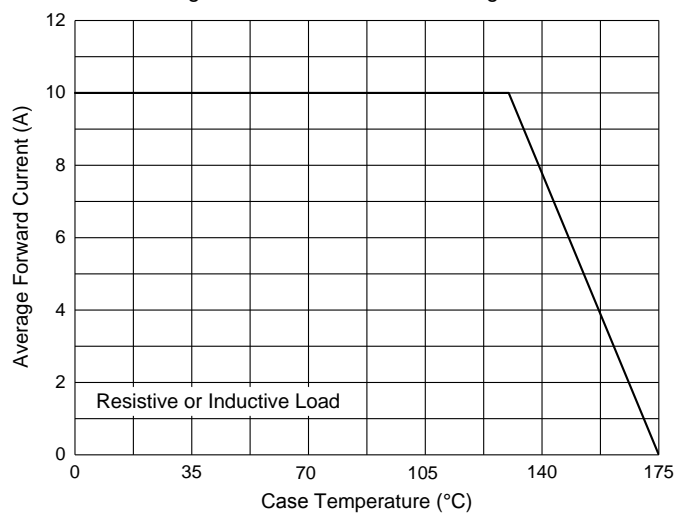


Fig. 2 - Typical Instantaneous Forward Characteristics

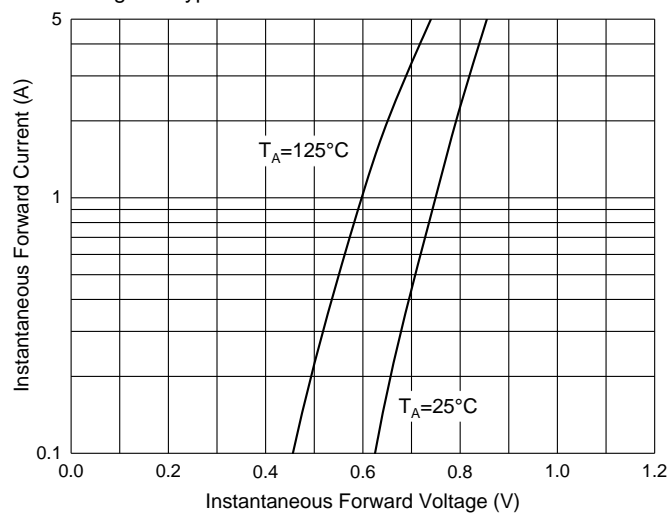
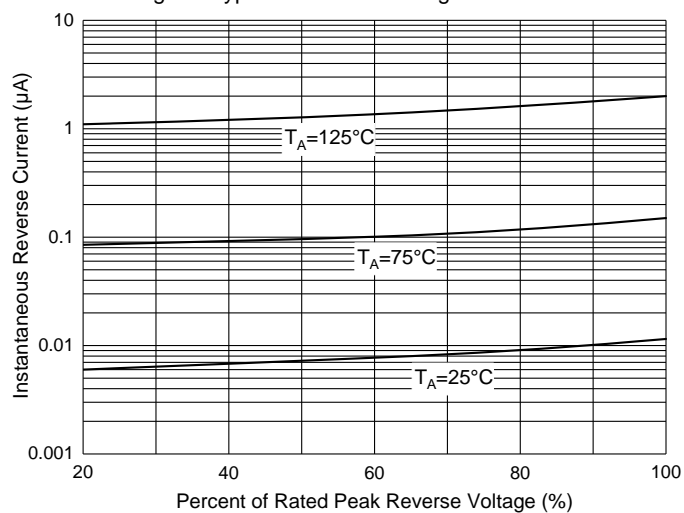


Fig. 3 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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

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