

### **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
- High Frequency Operation
- · High Surge Forward Current Capability

# 10 Amp Super Fast Rectifiers 400 Volts

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance : 5°C/W Junction to Case

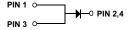
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURD1040C	MURD1040C	400V	280V	400V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

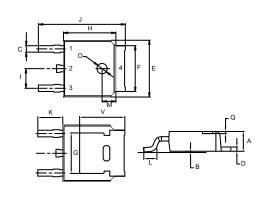
Average Rectified Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> =75°C	
Peak Forward Surge Current	I <sub>FSM</sub>	125A	8.3ms,Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.50V	I <sub>F</sub> =10A; T <sub>A</sub> =25°C	
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	0.01mA 0.1mA	T <sub>A</sub> =25°C T <sub>A</sub> =125°C	
Maximum Reverse Recovery Time	t <sub>rr</sub>	35ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>RR</sub> =0.25A	

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

Internal Structure



# **DPAK(TO-252)**



DIMENSIONS					
	INCHES				NOTE
DIM			MM		
	MIN	MAX	MIN	MAX	
Α	0.087	0.094	2.20	2.40	
В	0.000	0.005	0.00	0.13	
С	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
Е	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.190		4.83		TYP.
Н	0.236	0.244	6.00	6.20	
ı	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	
М	0.063		1.60		TYP.
0	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**

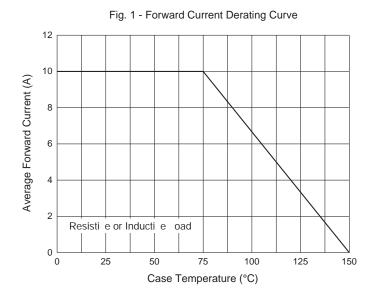


Fig. 3 - Typical Instantaneous Forward Characteristics

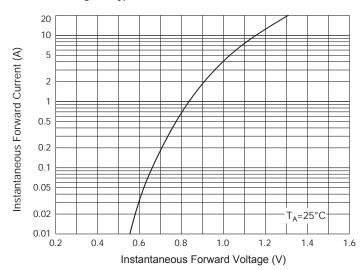


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

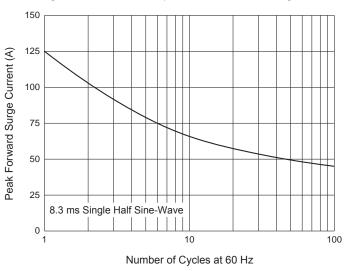
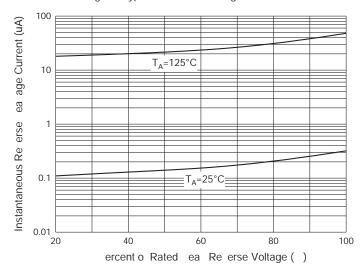


Fig. 4 - Typical Re erse ea age Characteristics





# **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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