

### **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
- Moisture Sensitivity Level 1
- Low Forward Voltage Drop
- Fast Reverse Recovery Time
- Planar Structure Die and Soft Recovery Characteristics

# **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
MURSD1060L	MURSD1060L	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

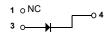
	_		
Average Rectified Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> = 85°C
Peak Forward Surge Current	I <sub>FSM</sub>	100A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.1V(Typ) 1.3V(Max) 1.1V(Max)	I <sub>F</sub> =10A;T <sub>J</sub> =25°C I <sub>F</sub> =10A;T <sub>J</sub> =25°C I <sub>F</sub> =10A;T <sub>J</sub> =150°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 200μΑ	T <sub>J</sub> =25°C; T <sub>J</sub> =150°C
Typical Junction Capacitance	CJ	115pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

# Dynamic Recovery Characteristics @ 25°C Unless Otherwise Specified

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Reverse Recovery	t <sub>rr</sub>	40ns(Typ.) 75ns(Max.)	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>RR</sub> =0.25A	
Time		160ns(Typ.) 250ns(Typ.)	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I - 10 A
Peak recovery current	I <sub>RRM</sub>	6.5A(Typ.) 10A(Typ.)	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	$I_F = 10 \text{ A}$ $di_F/dt = 200 \text{ A/}\mu\text{s}$ $V_R = 200 \text{ V}$
Reverse recovery charge	Q <sub>rr</sub>	565nC(Typ.) 1250nC(Typ.)	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	

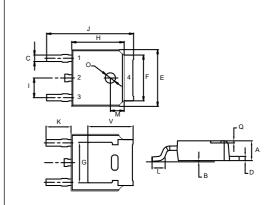
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

### Internal Structure



# 10 Amp FRED Rectifiers 600 Volts

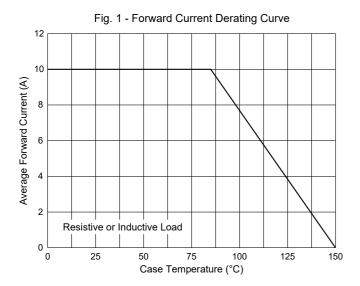
# **DPAK(TO-252)**

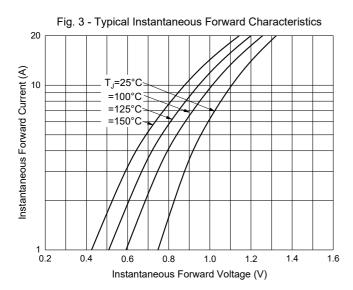


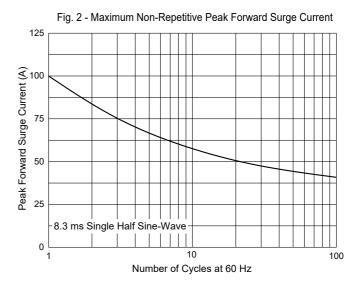
	DIMENSIONS				
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOIL
Α	0.087	0.094	2.20	2.40	
В	0.000	0.005	0.00	0.13	
С	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
Е	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.1	0.190		83	
Н	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.114		2.9	90	
L	0.055	0.067	1.40	1.70	
М	0.063		1.60		
0	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.3	35	

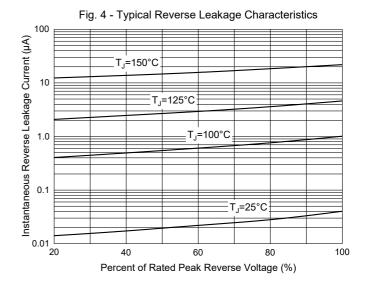


### **Curve Characteristics**











# **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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