

**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 Switching Losses and High Efficiency
- Low Reverse Leakage
- Reverse Recovery Time < 25ns

**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
MURSD860B	MURSD860B	600V	420V	600V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

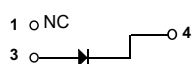
Average Rectified Forward Current	$I_{F(AV)}$	8.0A	$T_C = 25^\circ C$
Peak Forward Surge Current	$I_{FSM}$	70A	8.3ms, Half Sine
Instantaneous Forward Voltage	$V_F$	2.70V(Typ) 3.6V(Max) 1.8V(Typ)	$I_F=8A; T_J=25^\circ C$ $I_F=8A; T_J=25^\circ C$ $I_F=8A; T_J=150^\circ C$
Reverse Current At Rated DC Blocking Voltage	$I_R$	10µA 100µA	$T_J=25^\circ C;$ $T_J=150^\circ C$
Typical Junction Capacitance	$C_J$	40pF	Measured at 1.0MHz, $V_R=4.0V$

**Dynamic Recovery Characteristics @ 25°C Unless Otherwise Specified**

Reverse Recovery Time	$t_{rr}$	14ns(Typ.) 25ns(Max.)	$I_F=0.5A; I_R=1.0A;$ $I_{RR}=0.25A$	$I_F = 8 A$ $di_F/dt = 200 A/\mu s$ $V_R = 400 V$
		40ns(Typ.) 50ns(Typ.)	$T_J=25^\circ C$ $T_J=125^\circ C$	
Peak recovery current	$I_{RRM}$	1.7A(Typ.) 4.5A(Typ.)	$T_J=25^\circ C$ $T_J=125^\circ C$	
Reverse recovery charge	$Q_{rr}$	35nC(Typ.) 115nC(Typ.)	$T_J=25^\circ C$ $T_J=125^\circ C$	

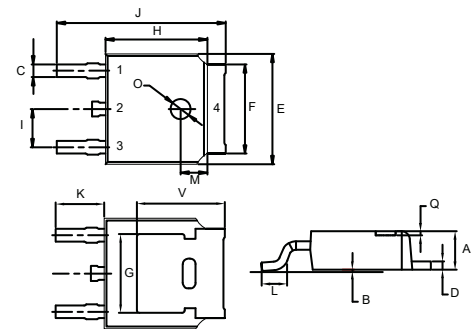
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

**Internal Structure**



**8 Amp  
FRED Rectifiers  
600 Volts**

**DPAK(TO-252)**



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		
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		
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

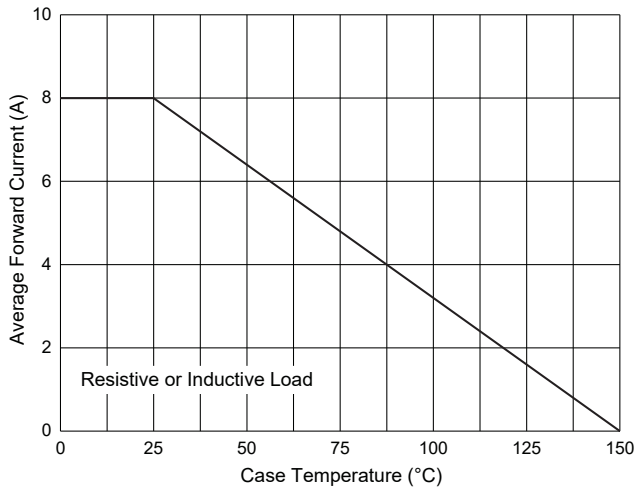


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current

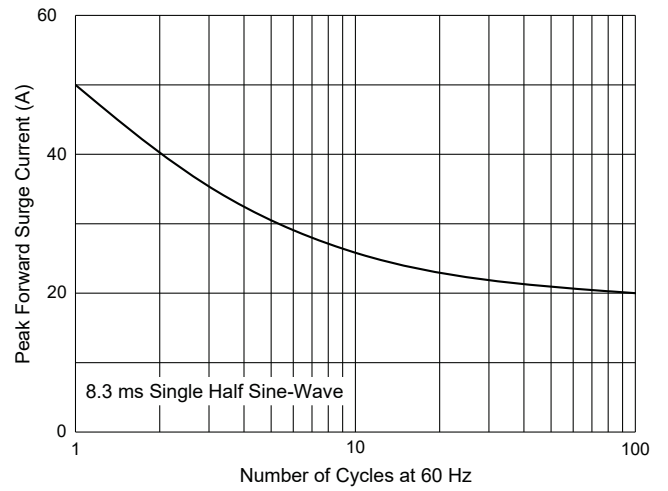


Fig. 3 - Typical Instantaneous Forward Characteristics

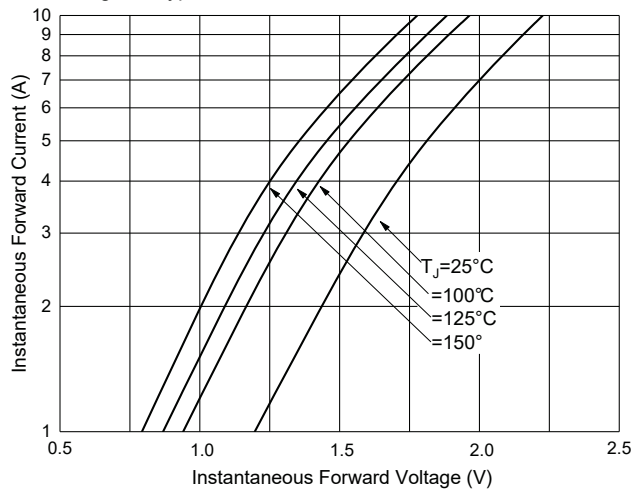
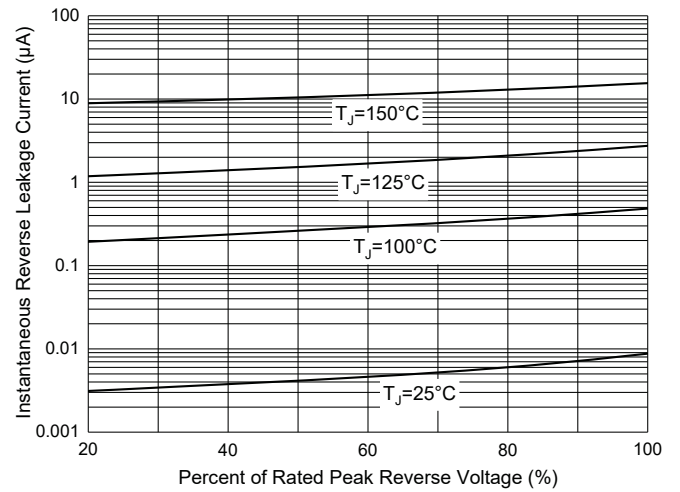


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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