Micro Commercial Components

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Super Fast Switching For High Efficiency
- Low Reverse Leakage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Planar Structure Die and Soft Recovery Characteristics

30 Amp Super Fast Recovery Rectifier 300 Volts

Maximum Ratings

- Operating Junction Temperature Range: -55ºC to +175ºC
- Storage Temperature Range: -55ºC to +175ºC
- Typical Thermal Resistance: 0.5°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR3030PT	MUR3030PT	300V	210V	300V

Electrical Characteristics @ 25°C Unless Otherwise Specified

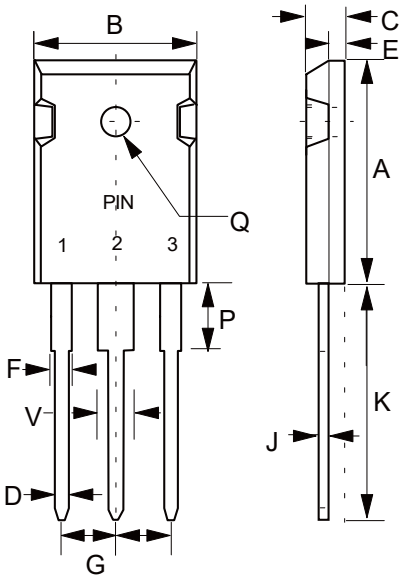
Average Rectified Forward Current (Rated VR-20KHz Square Wave) - 50% Duty Cycle	$I_{F(AV)}$	30A	T_C=130ºC
Peak Forward Surge Current	I_{FSM}	180A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.07V(Typ) 1.35V(Max) 1.22V(Typ) 1.5V(Max) 0.95V(Typ) 1.05V(Max) 1.12V(Typ) 1.25V(Max)	I_F=15A,T_J=25°C I_F=30A,T_J=25°C I_F=15A,T_J=125°C I_F=30A,T_J=125°C
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	5μA 0.1mA	T_J=25ºC; T_J=125ºC
Maximum Reverse Recovery Time	t_{rr}	35ns	I_F=0.5A; I_R=1.0A; I_{RR}=0.25A

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

Internal Structure

PIN 1 ➢ PIN 2
PIN 3 ➢ CASE

TO-247



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.787	0.866	20.00	22.00	
B	0.598	0.638	15.20	16.20	
C	0.185	0.208	4.70	5.30	
D	0.035	0.059	0.90	1.50	
E	0.059	0.094	1.50	2.40	
F	0.067	0.091	1.70	2.30	
J	0.019	0.031	0.48	0.80	
K	0.748	0.833	19.00	21.15	
P	0.122	0.189	3.10	4.80	
Q	0.118	0.150	3.00	3.80	Φ
V	0.106	0.134	2.70	3.40	
G	0.197	0.224	5.00	5.70	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

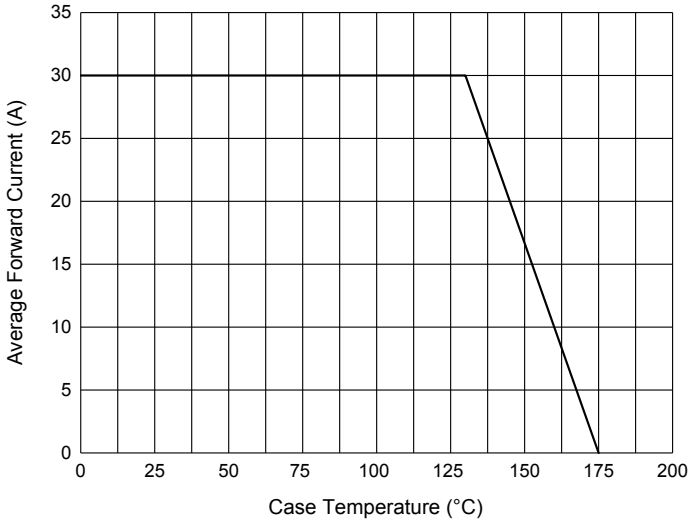


Fig. 2 - Typical Instantaneous Forward Characteristics

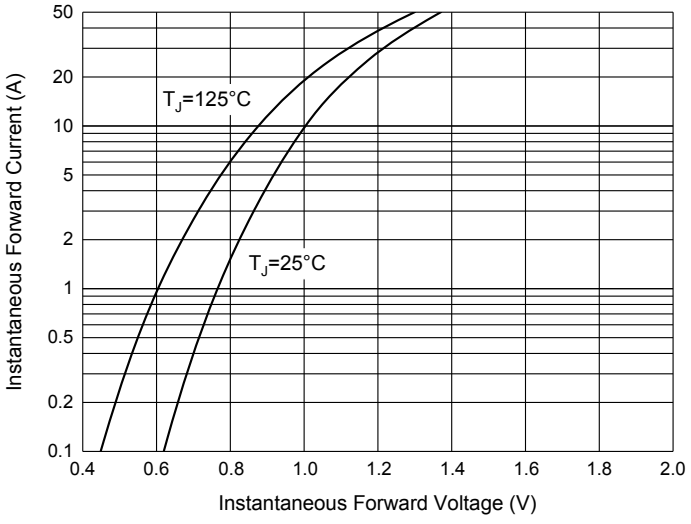


Fig. 3 - Typical Reverse Leakage Characteristics

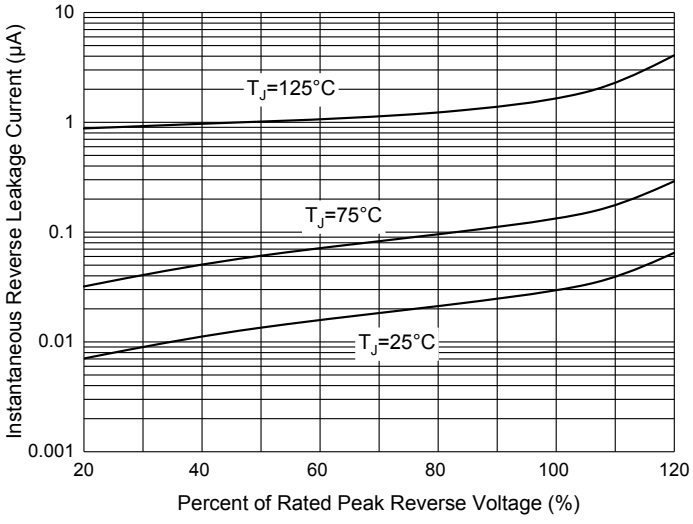
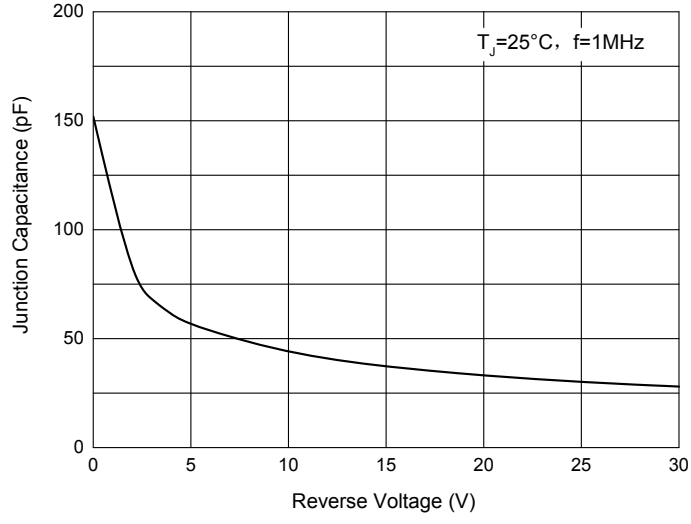


Fig. 4 - Junction Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:30pcs/Tube,360pcs/Box,1.8Kpcs/Carton

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

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