

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Ultra Low Forward Voltage Drop
- Low Thermal Resistance
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 40°C/W Junction to Ambient

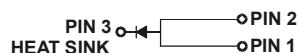
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR20100ULPS	20100UL	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	300A	8.3ms, Half Sine
Forward Voltage	V_F	0.60V(Typ) 0.66V(Max)	$I_F = 20\text{A}$
Reverse Current	I_R	30 μA (Typ) 80 μA (Max)	$V_R = 100$
Breakdown Voltage	V_{BR}	100V(Min)	$I_R = 0.5\text{mA}$

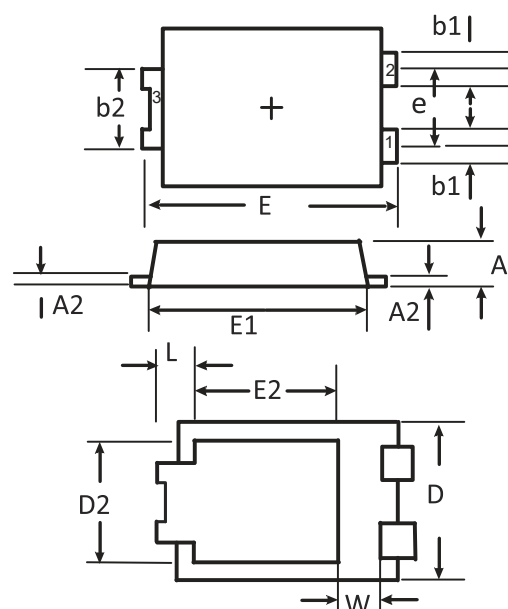
Notes: 1.High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

Internal Structure



20 Amp Low VF Schottky Barrier Rectifier 100 Volts

TO-277B



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.039	0.047	1.00	1.20	
A2	0.006	0.017	0.15	0.43	
b1	0.030	0.041	0.75	1.05	
b2	0.065	0.077	1.65	1.95	
D	0.148	0.169	3.75	4.30	
D2	0.110	0.126	2.80	3.20	
E	0.250	0.264	6.35	6.70	
e	0.065	0.077	1.65	1.95	
E1	0.207	0.228	5.25	5.80	
E2	0.120	0.142	3.05	3.60	
L	0.028	0.051	0.70	1.30	
W	0.031	0.056	0.80	1.42	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

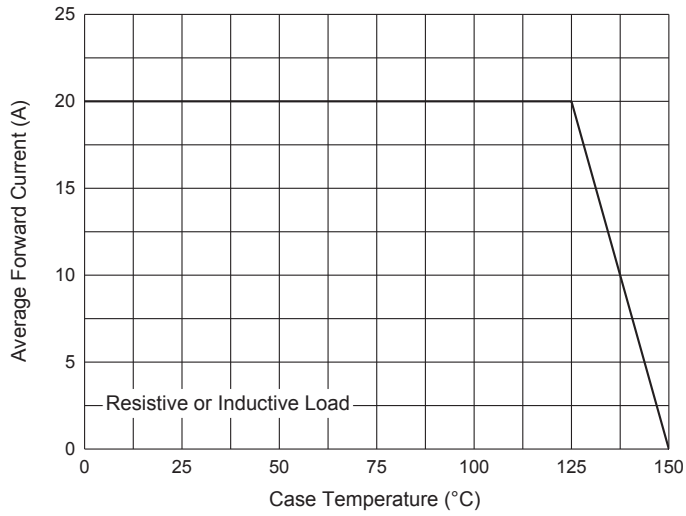


Fig. 2 - Typical Junction Capacitance

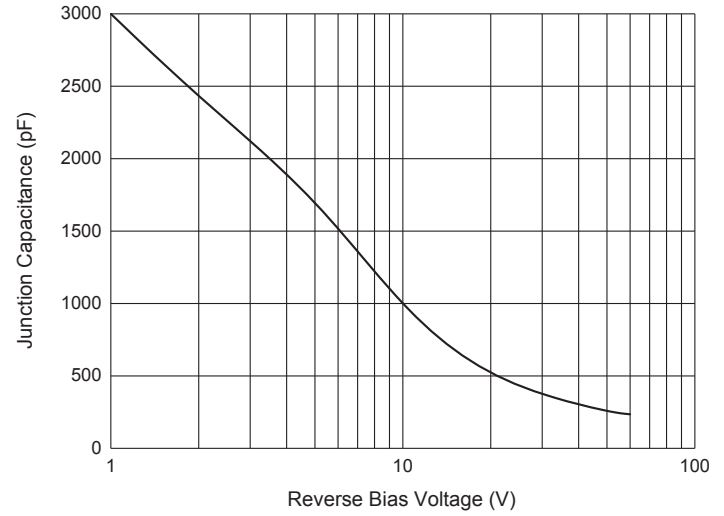


Fig. 3 - Typical Instantaneous Forward Characteristics

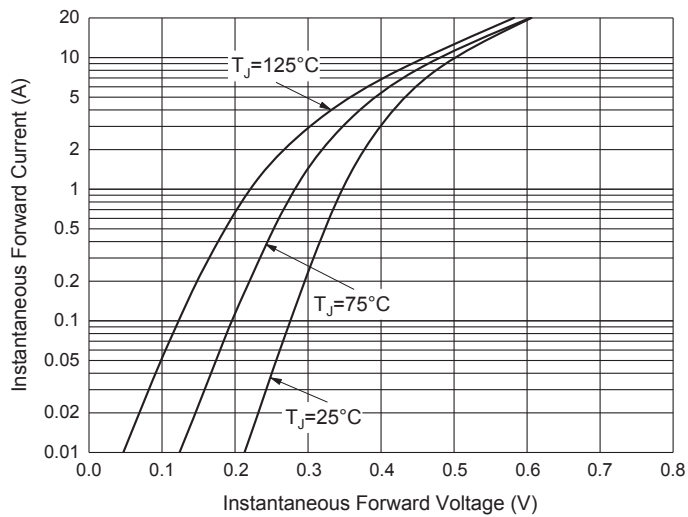
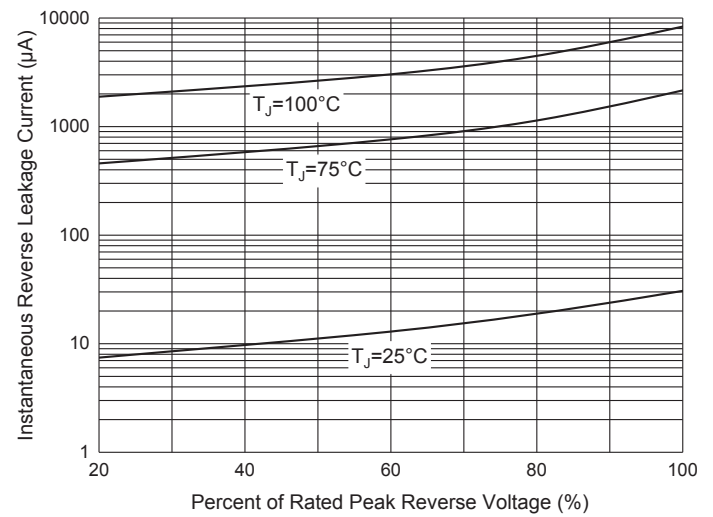


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:5Kpcs/Reel

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

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