

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Ultra-Small Surface Mount Package
- Low Forward Voltage Drop
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance(Note2): 625°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	RMS Reverse Voltage VR(RMS)	DC Blocking Voltage VR
MBR0545L2	45V	32V	45V

Electrical Characteristics @ 25°C Unless Otherwise Specified

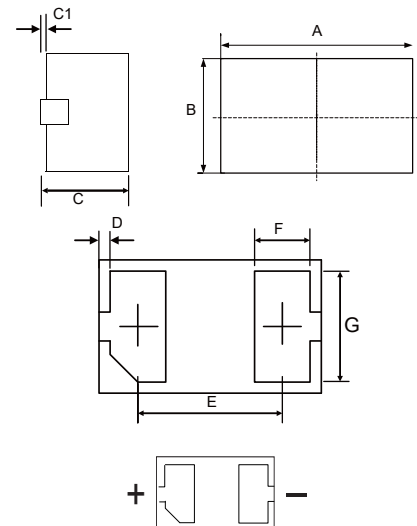
Forward Continuous Current	I_F	500mA	
Max Forward Surge Current	I_{FSM}	3A	$t_p=8.3ms$
Power Dissipation	P_D	200mW	$T_A = 25^\circ C$
Max Forward Voltage	V_F	180mV 200mV 270mV 360mV 500mV	$I_F=0.1mA;$ $I_F=1.0mA;$ $I_F=10mA;$ $I_F=100mA;$ $I_F=500mA;$
Max Reverse Current	I_R	30µA 50µA	$V_R=10V$ $V_R=30V$
Max Junction Capacitance	C_J	60pF	Measured at 1.0MHz, $V_R=1.0V$
Max Reverse Recovery Time	t_{rr}	20ns	$I_F=I_R=10mA, I_{tr}=0.1I_R,$ $R_L=100\Omega$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Note: 2. Part mounted on FR-4 board with recommended pad layout.

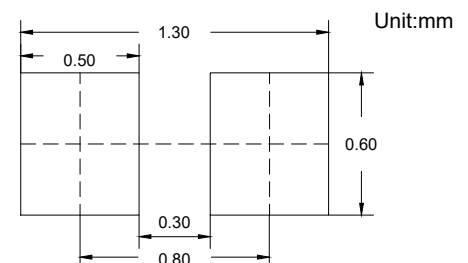
200mWatt, 45Volt Schottky Barrier Diode

DFN1006-2L

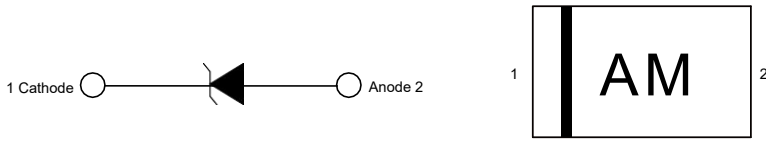


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.022	0.026	0.55	0.65	
C	0.016	0.020	0.40	0.50	
C1	-----	0.002	-----	0.05	
D	0.001	0.003	0.02	0.08	
E	0.026BSC		0.65BSC		
F	0.008	0.012	0.20	0.30	
G	0.018	0.022	0.45	0.55	

Suggested Solder Pad Layout



Internal Structure and Marking Code



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

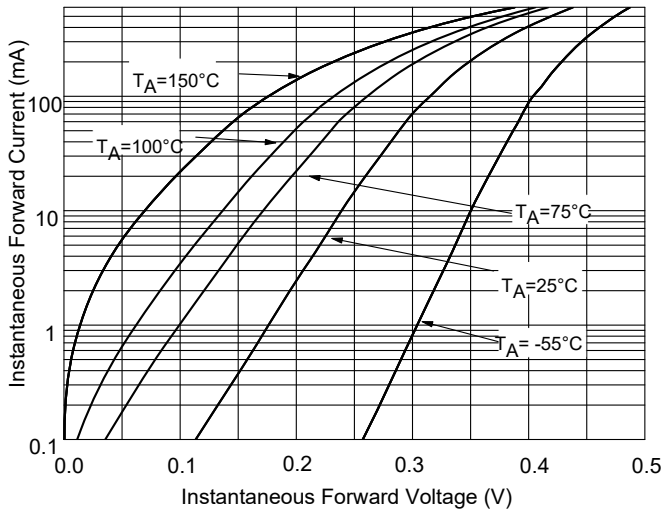


Fig. 2 - Typical Reverse Leakage Characteristics

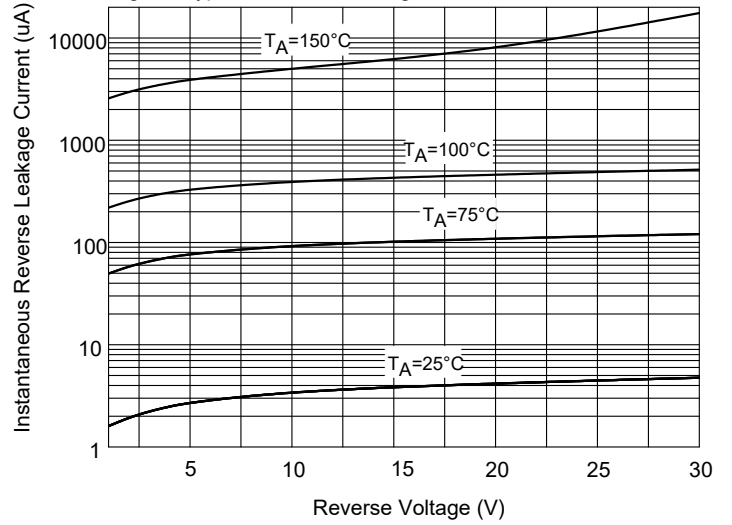


Fig. 3 - Capacitance Characteristics

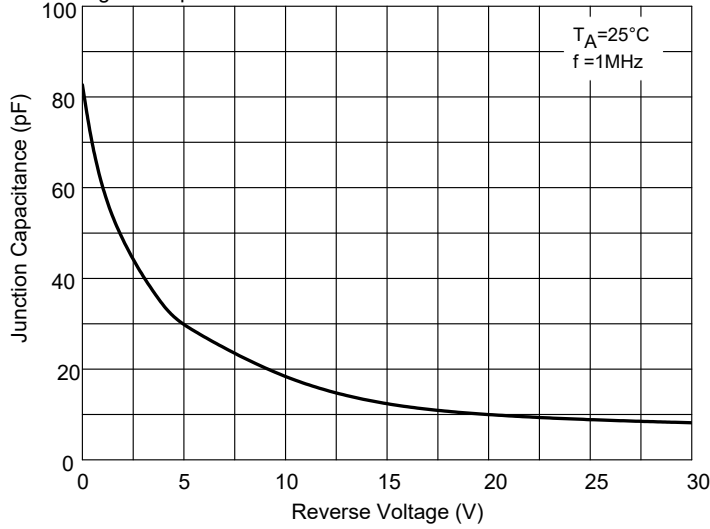
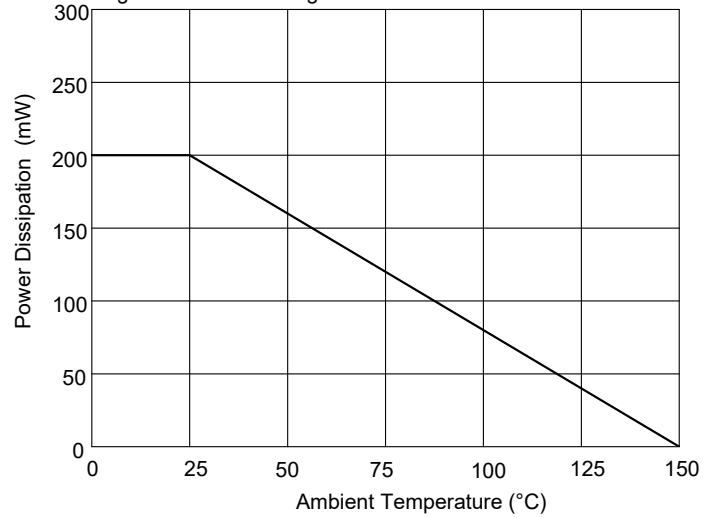


Fig. 4 - Power Derating Curve



Ordering Information

Device	Packing
MBR0545L2-TP	Tape&Reel;10Kpcs/Reel

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