

Features

- For Surface Mount Application and High Current Capability
- Higher Temp Soldering: 260°C for 10 Seconds At Terminals
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +125°C
- Thermal Resistance: 500°C/W Junction to Ambient(Note 2)

MCC Part Number	Repetitive Peak Reverse Voltage V_{RRM}	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage V_R
MBR240P1	40V	28V	40V

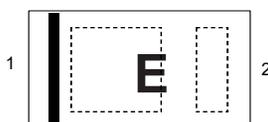
Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Value
Average Rectified Current	$I_{F(AV)}$	2A
Peak Forward Surge Current(t=8.3ms)	I_{FSM}	12A
Power Dissipation	P_D	200mW

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

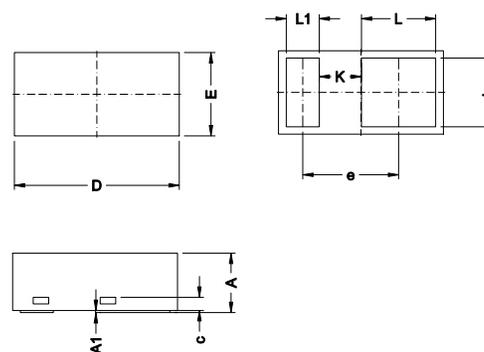
2. Valid Provided that Terminals are Kept at Ambient Temperature.

Internal Structure and Marking Code



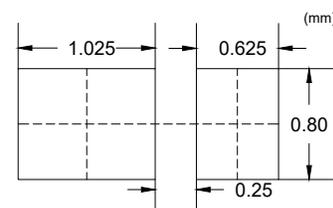
200mW, 40 Volt Schottky Barrier Diode

DFN1608-2L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.016	0.020	0.40	0.52	
A1	0.000	0.004	0.00	0.10	
b	0.022	0.030	0.56	0.76	
c	0.005		0.127		TYP
D	0.059	0.067	1.50	1.70	
E	0.028	0.035	0.70	0.90	
e	0.037		0.93		TYP
K	0.016		0.41		TYP
L	0.026	0.032	0.67	0.82	
L1	0.011	0.017	0.27	0.42	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=500\mu A$	40			V
Forward Voltage	V_F	$I_F=1A$		0.47	0.56	V
		$I_F=1.5A$		0.53	0.65	V
Reverse Current	I_R	$V_R=40V$			50	μA
		$V_R=40V, T_j=125^\circ C$			5	mA
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		100	150	pF

* Pulse Test: Pulse Width 300 μsec , Duty Cycle 2%

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

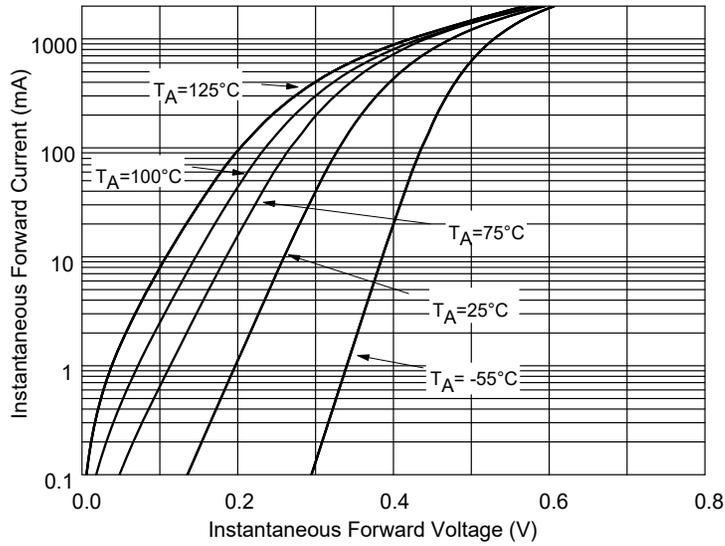


Fig. 2 - Typical Reverse Leakage Characteristics

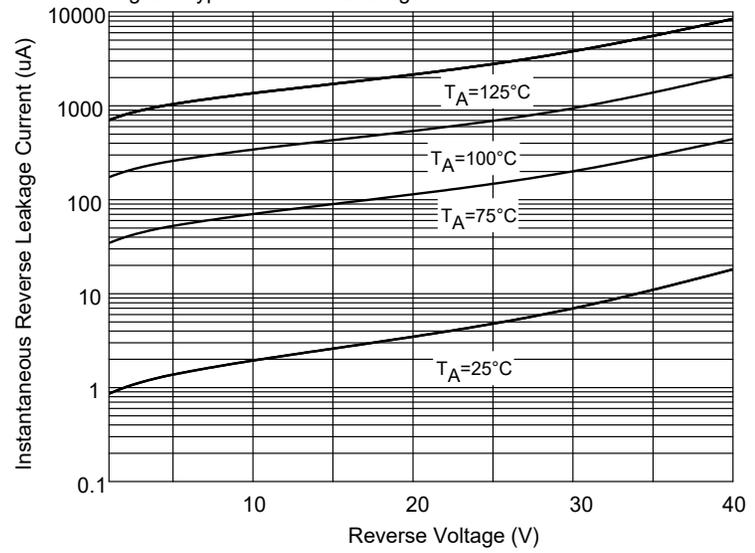


Fig. 3 - Capacitance Characteristics

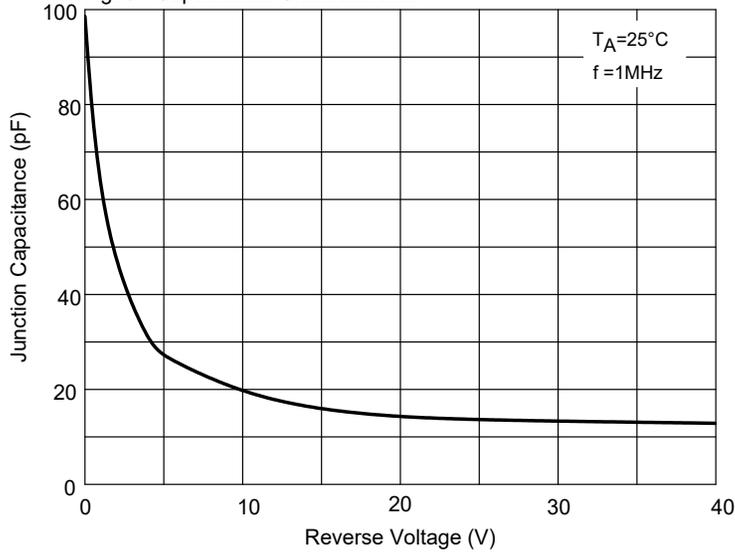
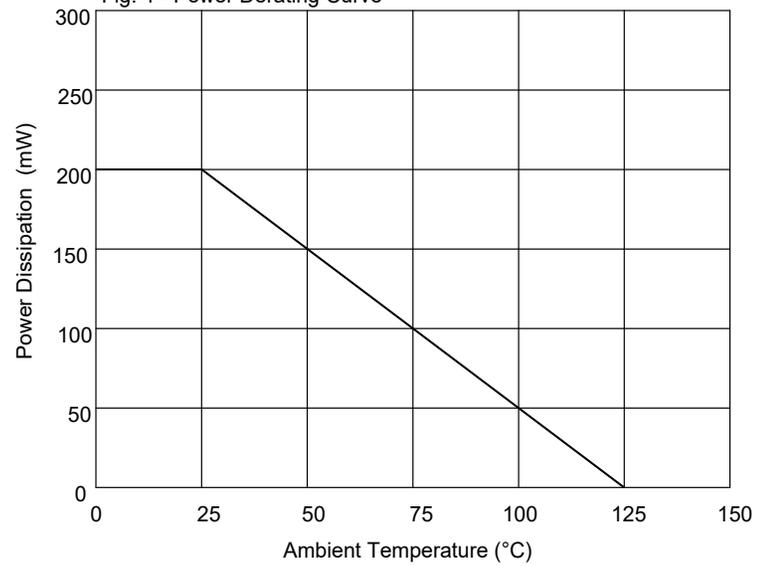


Fig. 4 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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