

**Features**

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Ultra-Small Surface Mount Package
- High Reliability
- 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 +100°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 200°C/W Junction to Ambient<sup>(Note2)</sup>

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
MBR0530L2	R3	30V	30V

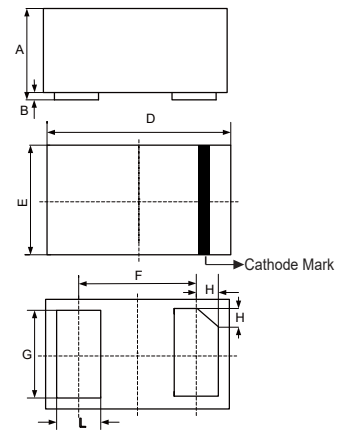
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	0.5A	
Peak Forward Surge Current	$I_{FSM}$	3A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage Drop	$V_F$	0.18V 0.20V 0.27V 0.36V 0.54V	$I_F=0.1mA;$ $I_F=1mA;$ $I_F=10mA;$ $I_F=100mA;$ $I_F=500mA;$
Maximum Reverse Leakage Current	$I_R$	0.2mA 0.5mA	$V_R=10V$ $V_R=30V$
Typical Junction Capacitance	$C_J$	32pF	Measured at 1.0MHz, $V_R=0V$

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. Device mounted a 20\*15mm FR-4 PCB, with both 10\*8mm pad 1oz. thick copper, single sided.

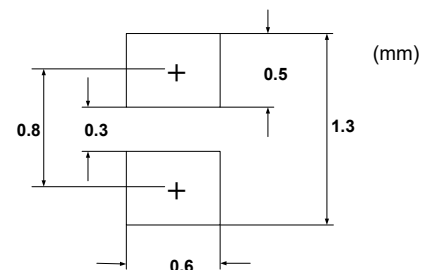
**0.5 Amp  
Schottky Barrier  
Rectifier  
30 Volts**

**DFN1006-2**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.013	0.022	0.34	0.55	
B	0.000	0.002	0.00	0.05	
D	0.037	0.043	0.95	1.08	
E	0.022	0.027	0.55	0.68	
F	0.026 REF.		0.650 REF.		
G	0.016	0.024	0.40	0.60	
H	0.003	0.007	0.07	0.17	
L	0.008	0.012	0.20	0.30	

**SUGGESTED SOLDER PAD LAYOUT**



**Curve Characteristics**

Fig. 1 - Typical Instantaneous Forward Characteristics

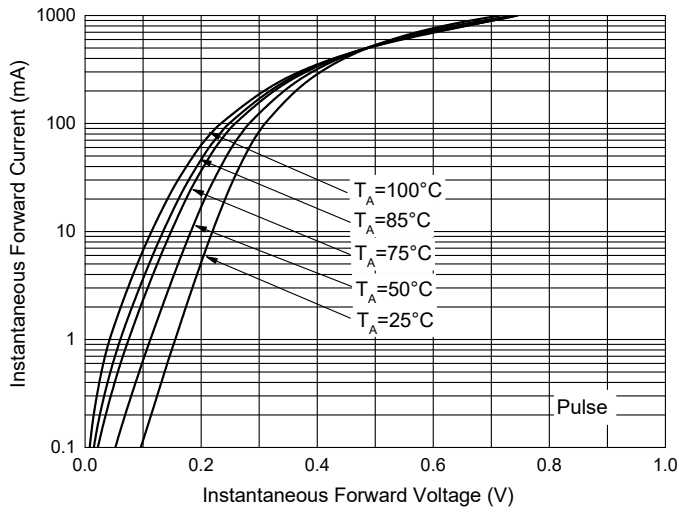


Fig. 2 - Typical Reverse Leakage Characteristics

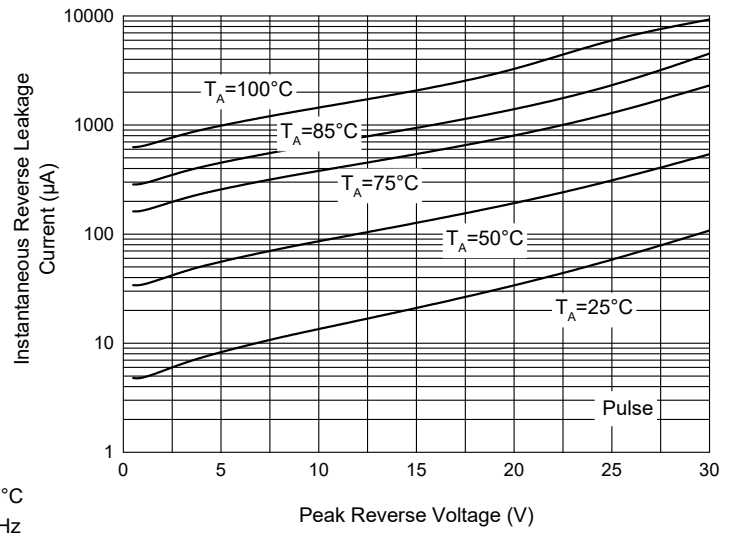


Fig. 3 - Capacitance Characteristics

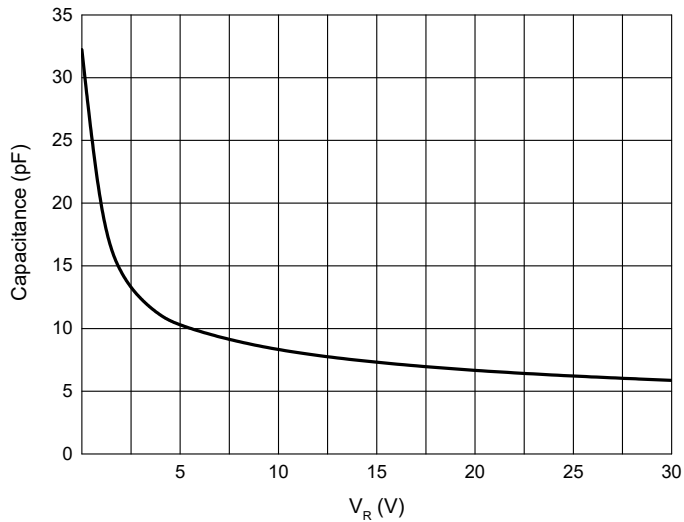
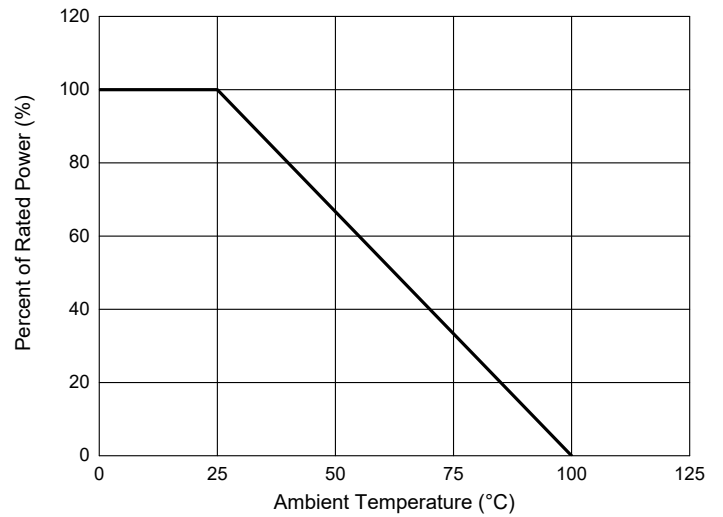


Fig. 4 - Power Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel;10Kpcs/Reel

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