

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
- Moisure Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)

0.5 Amp Schottky Barrier Rectifier 30 Volts

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(Note2)

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

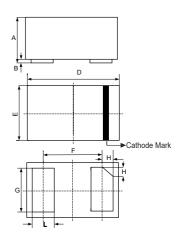
Electrical Characteristics @ 25°C Unless Otherwise Specified

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 =500mA;
Maximum Reverse Leakage Current	I _R	0.2mA 0.5mA	V _R =10V V _R =30V
Typical Junction Capacitance	CJ	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.

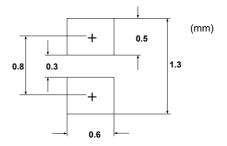
2. Device mounted a 20*15mm FR-4 PCB, with both 10*8mm pad 1oz. thick copper, single sided.

DFN1006-2



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

SUGGESTED SOLDER PAD LAYOUT





Curve Characteristics

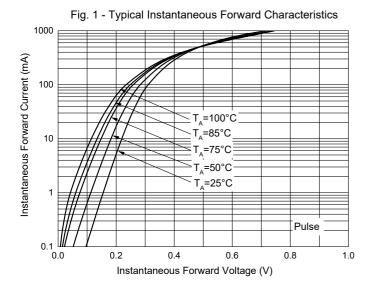
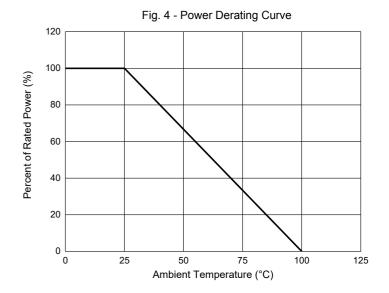


Fig. 2 - Typical Reverse Leakage Characteristics 10000 Instantaneous Reverse Leakage Current (µA) T₄=100°C 1000 100 T₄=50°C T₄=25°C 10 Pulse 25 5 10 15 30 T_A=25°C Peak Reverse Voltage (V) f=1MHz

Fig. 3 - Capacitance Characteristics 35 30 25 Capacitance (pF) 15 10 5 0 5 10 15 20 25 30 $V_{R}(V)$





Ordering Information

Device	Packing	
Part Number-TP	Tape&Reel10Kpcs/Reel	

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp**. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp**, and all the companies whose products are represented on our website, harmless against all damages. **Micro Commercial Components Corp**, products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC):

MBR0530L2-TP