

Features

- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

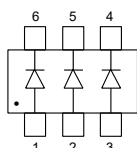
MCC Part Number		Device Marking	
BAS16TW		KA2	
MMBD4148TW		KA2	
Peak Forward Current	I_F	150mA	
Power Dissipation	P_D	200mW	$T_A=25^\circ\text{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

Reverse Voltage	V_R	75V	$I_R=100\mu\text{A}$
Maximum Forward Voltage	V_F	0.715V 0.855V 1.000V 1.250V	$I_{FM}=1.0\text{mA}$ $I_{FM}=10.0\text{mA}$ $I_{FM}=50.0\text{mA}$ $I_{FM}=150.0\text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0 μA 0.025 μA	$V_R=75\text{V}$ $V_R=20\text{V}$
Diode Capacitance	C_D	2.0pF	$V_R=0.0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	4.0ns	$I_F=10\text{mA}, I_R=10\text{mA}$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

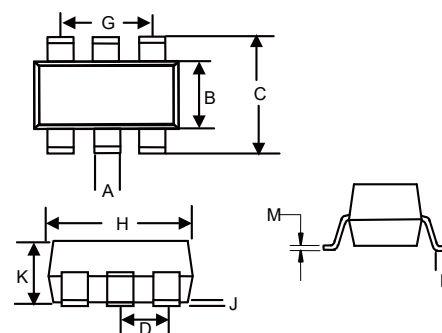
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



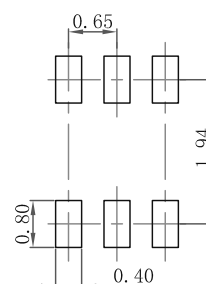
200mW Switching Diode

SOT-363



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.006	0.014	0.15	0.35	
B	0.045	0.053	1.15	1.35	
C	0.079	0.096	2.00	2.45	
D	0.026		0.65 Nominal		
G	0.047	0.055	1.20	1.40	
H	0.071	0.087	1.80	2.20	
J	-----	0.004	-----	0.10	
K	0.031	0.043	0.80	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

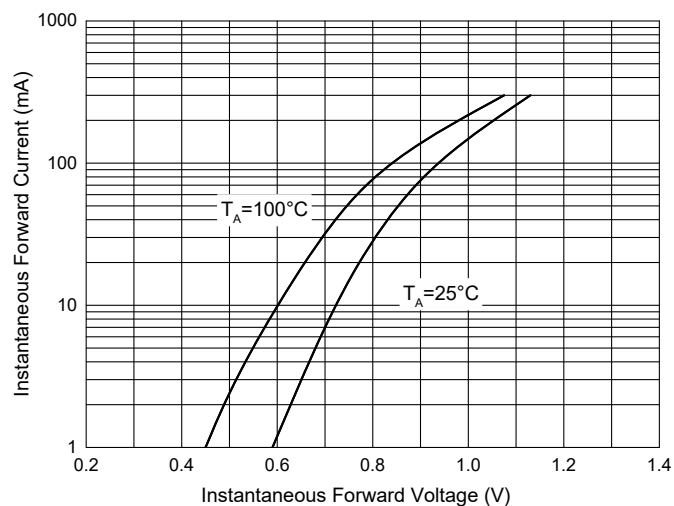


Fig. 2 - Typical Reverse Leakage Characteristics

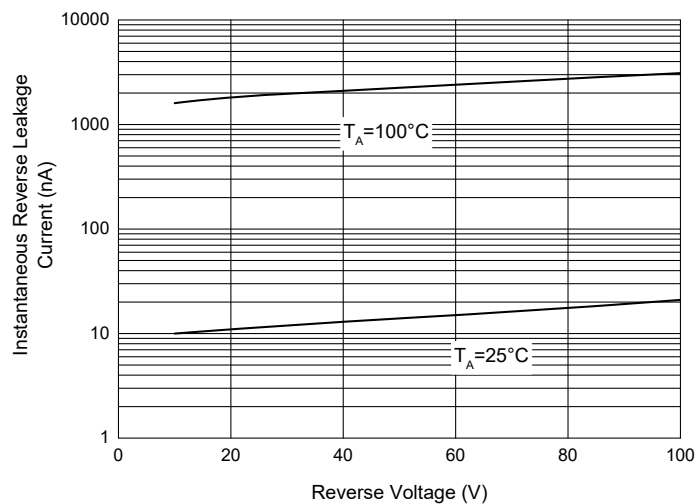
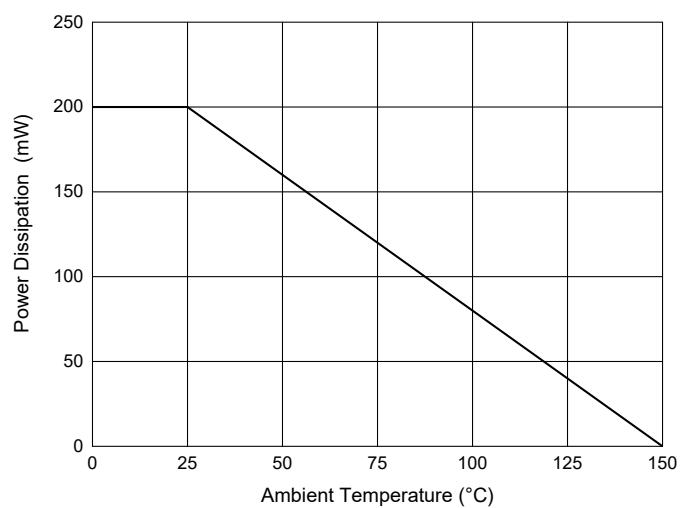


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel
Part Number-13P	Tape&Reel: 10Kpcs/Reel

For packaging details, go to our website at: <https://www.mccsemi.com/pdf/productpackaging/SOT-363%20Package.pdf>

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