

**Features**

- Fast Switching
- Low Forward Voltage Drop
- Low Power Dissipation
- Ultra-Small Surface Mount Package
- 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

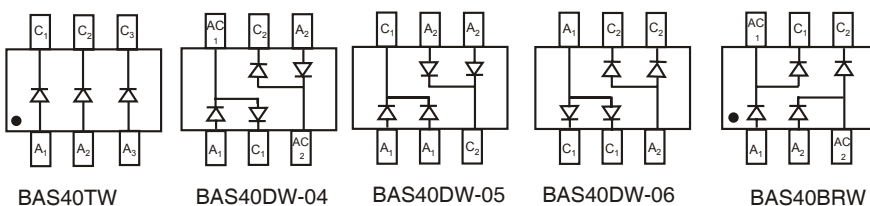
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAS40TW	K43	40V	40V
BAS40DW-04	K44	40V	40V
BAS40DW-05	K45	40V	40V
BAS40DW-06	K461	40V	40V
BAS40BRW	K47	40V	40V

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

Average Forward Current	$I_F$	200mA	
Power Dissipation	$P_d$	200mW	
Minimum Reverse breakdown voltage	$V_{(BR)}$	40V	$I_R = 10\mu A$
Maximum Forward Voltage	$V_F$	380mV 1000mV	$I_F=1.0mA$ $I_F=40mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.2 $\mu A$	$V_R = 30V$
Maximum Junction Capacitance	$C_T$	5.0pF	Measured at 1.0MHz, $V_R=0.0V$
Maximum Reverse Recovery Time	$t_{rr}$	5.0nS	$I_R=I_F=10mA, I_{rr}=1mA, R_L=100\Omega$

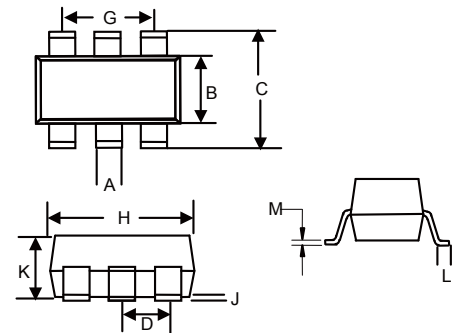
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Internal Structure:**



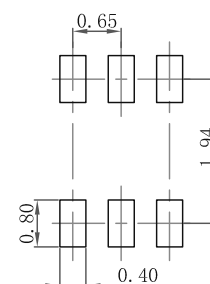
**200mW, 40Volt Schottky Barrier Diode**

**SOT-363**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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

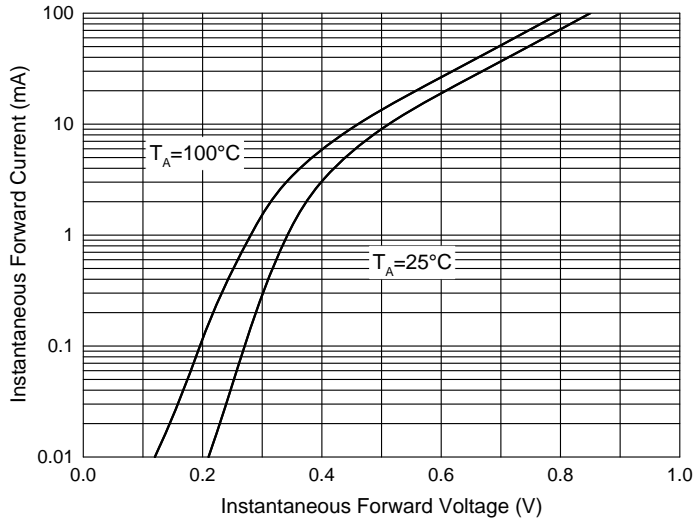


Fig. 2 - Typical Reverse Leakage Characteristics

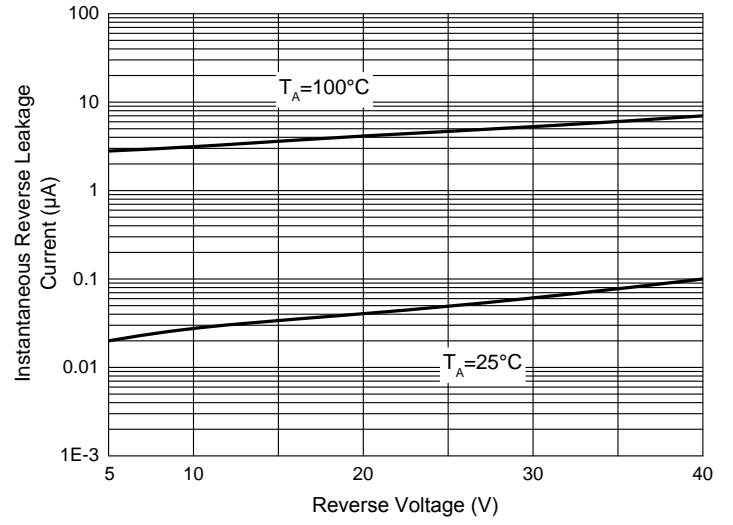
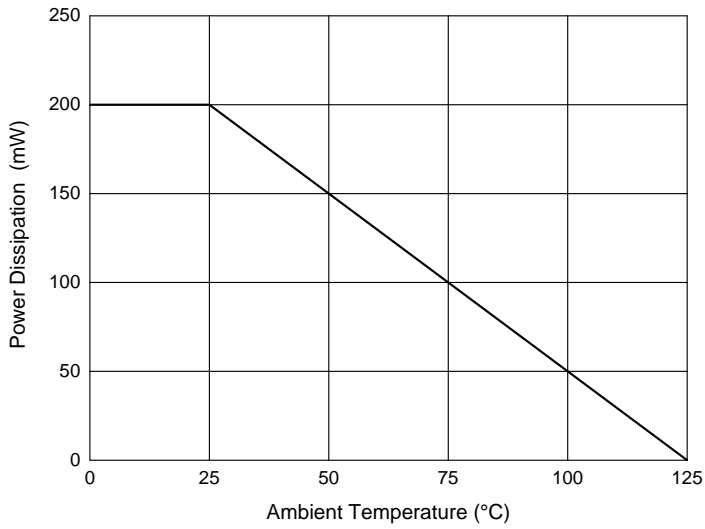


Fig. 3 - Power Derating Curve



## Ordering Information

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

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