

Features

- Extremely-Fast Switching Speed
- Low Forward Voltage Drop
- 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: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 625°C/W Junction to Ambient

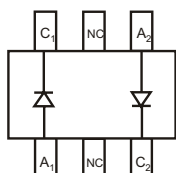
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAT54DW	KLD	30V	30V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Minimum Reverse Breakdown Voltage	$V_{(BR)}$	30V	$I_R = 10\mu A$
Average Forward Current	I_F	200mA	
Power Dissipation	P_d	200mW	
Peak Forward Surge Current	I_{FSM}	600mA	$t=8.3ms$
Repetitive Peak Forward Current	I_{FRM}	300mA	
Maximum Forward Voltage	V_F	240mV 320mV 400mV 500mV 1000mV	$I_F=0.1mA$ $I_F=1.0mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	2.0μA	$V_R = 25V$
Maximum Junction Capacitance	C_T	10.0pF	Measured at 1.0MHz, $V_R=1.0V$
Maximum Reverse Recovery Time	t_{rr}	5nS	$I_F= I_R=10mA$, $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$

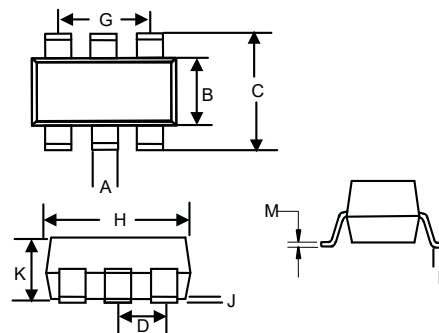
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



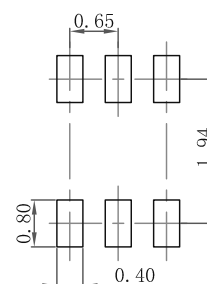
200mW, 30Volt Schottky Barrier Diode

SOT-363



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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

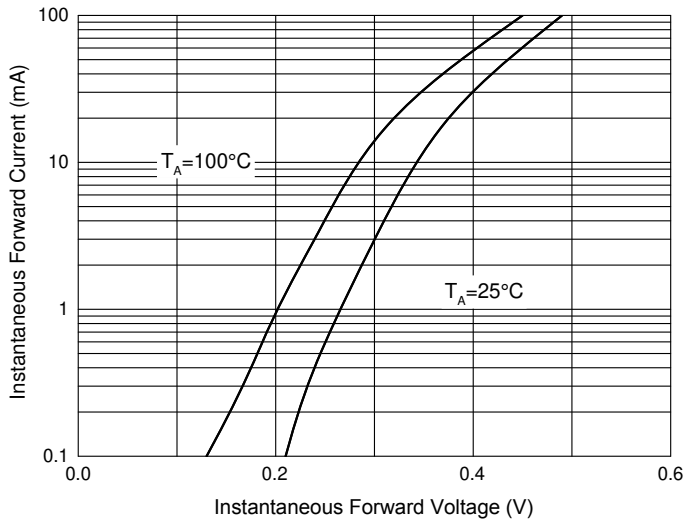


Fig. 2 - Typical Reverse Leakage Characteristics

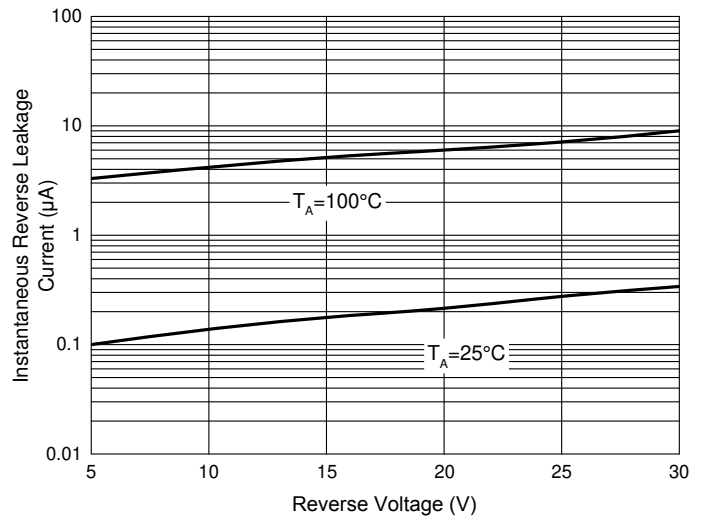
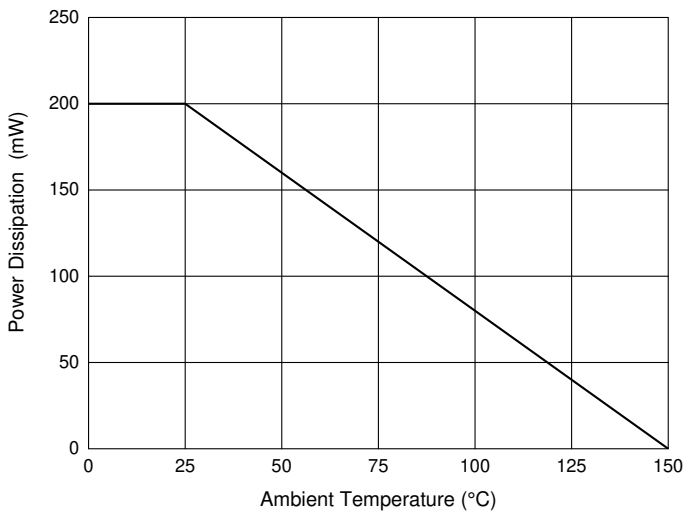


Fig. 3 - Power Derating Curve



Ordering Information

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

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