



THE DATASHEET OF BAT54V-TP



Features

- Fast Switching Speed
- Low Forward Voltage Drop
- PN Junction Guard Ring for Transient and ESD Protection
- Lead Free Plating
- 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: 833°C/W Junction to Ambient

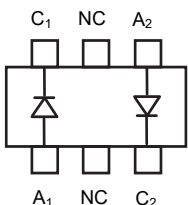
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAT54V	KAV	30V	30V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Minimum Reverse Breakdown Voltage	$V_{(BR)}$	30V	$I_R = 100\mu A$
Average Forward Current	I_F	200mA	
Power Dissipation	P_d	150mW	
Maximum Forward Voltage	V_F	380mV 1000mV	$I_F=1.0mA, tp<300\mu s$ $I_F=40mA, tp<300\mu s$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	2 μA	$V_R = 25V$
Maximum Total Capacitance	C_T	10.0pF	Measured at 1.0MHz, $V_R=1.0V$
Maximum Reverse Recovery Time	T_{rr}	5nS	$I_F=10mA$, $I_R=10mA\sim 1mA$ $R_L=100\Omega$

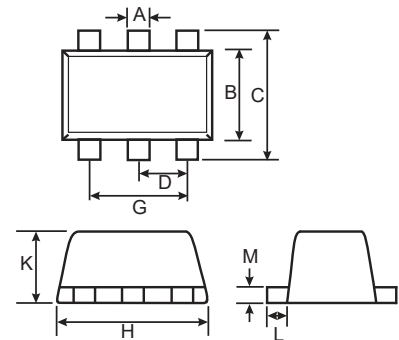
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



150mW, 30Volt Schottky Barrier Diode

SOT-563



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.006	0.011	0.15	0.30	
B	0.043	0.051	1.10	1.30	
C	0.059	0.067	1.50	1.70	
D	0.020		0.50		TYP.
G	0.035	0.043	0.90	1.10	
H	0.059	0.067	1.50	1.70	
K	0.022	0.026	0.55	0.65	
L	0.004	0.011	0.10	0.30	
M	0.004	0.007	0.10	0.18	

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

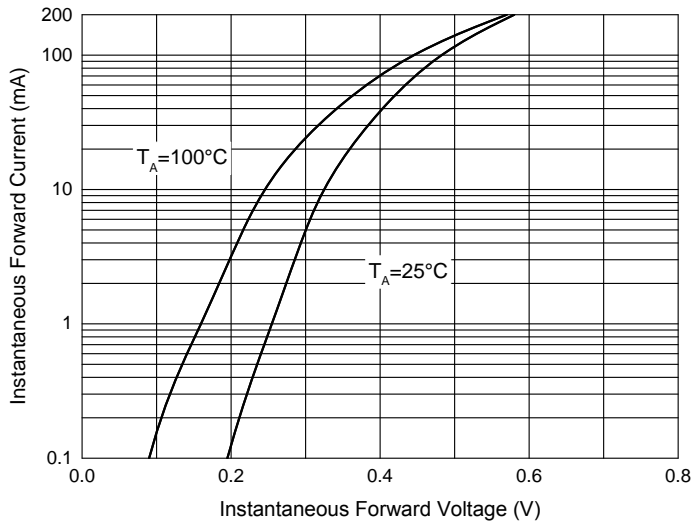


Fig. 2 - Typical Reverse Leakage Characteristics

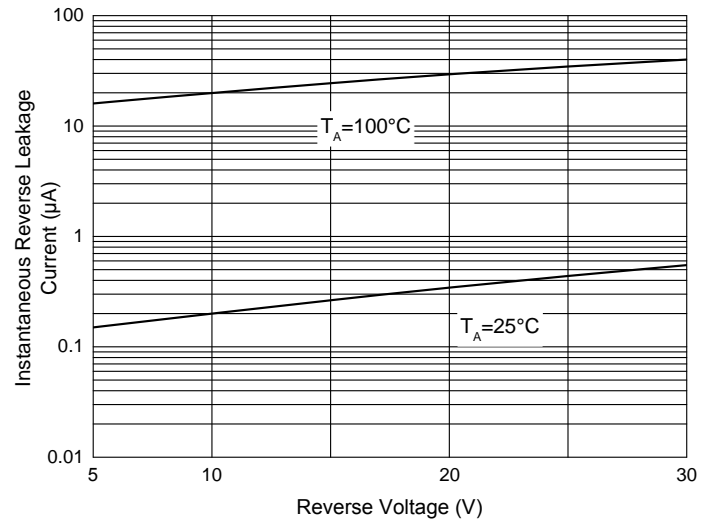
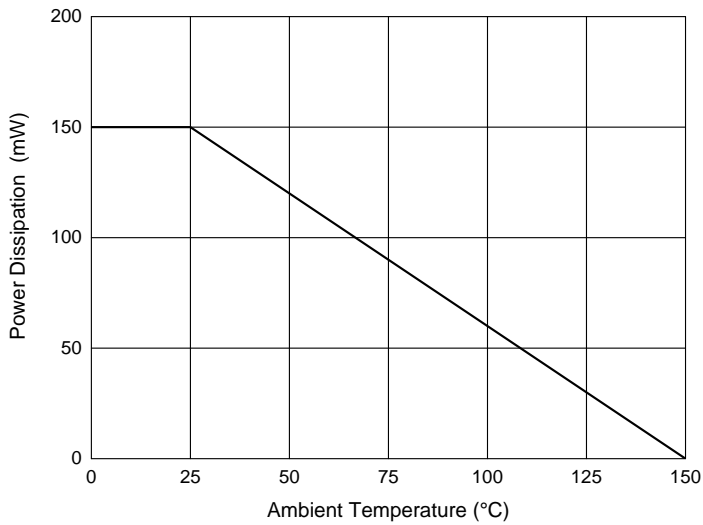


Fig. 3 - Power Derating Curve



Ordering Information

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

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