

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 = 10μA
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 =30mA I_F =100mA
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	2.0µA	V _R = 25V
Maximum Junction Capacitance	Ст	10.0pF	Measured at 1.0MHz, V _R =1.0V
Maximum Reverse Recovery Time	t _{rr}	5nS	$I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 \times I_R,$ $R_L = 100 \Omega$

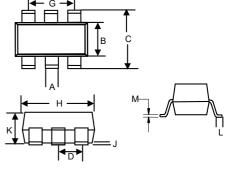
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



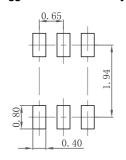
200mW, 30Volt Schottky Barrier Diode





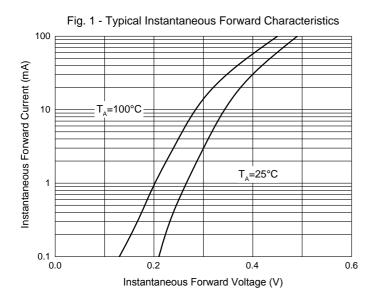
DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.006	0.014	0.15	0.35		
В	0.045	0.053	1.15	1.35		
С	0.079	0.096	2.00	2.45		
D	0.026		0.65 Nominal			
G	0.047	0.055	1.20	1.40		
Н	0.071	0.087	1.80	2.20		
J		0.004		0.10		
K	0.031	0.043	0.80	1.10		
L	0.010	0.018	0.26	0.46		
М	0.003	0.006	0.08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

Suggested Solder Pad Layout





Curve Characteristics



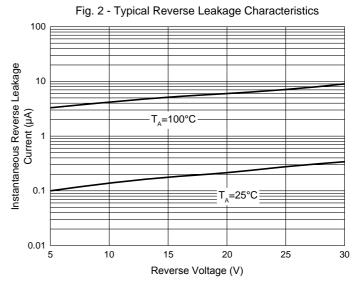


Fig. 3 - Power Derating Curve

250
200
150
50
0 25 50 75 100 125 150
Ambient Temperature (°C)

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Ordering Information

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

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