



BAT54TW/ADW/ CDW/SDW/BRW

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Fast Switching and Low Forward Voltage Drop
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

Continuous Reverse Voltage	V_R	30V
Forward Continuous Current	I_F	200mA
Repetitive Peak Forward Current	I_{FRM}	300mA
Peak Forward Current $t < 1s$	I_{FSM}	600mA
Power Dissipation @ $T_A = 25^\circ C$	P_D	200mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	$625^\circ C/W$
Storage Temperature Range	T_{stg}	$-65^\circ C$ to $125^\circ C$
Operating Temperature Range	T_j	$-65^\circ C$ to $125^\circ C$

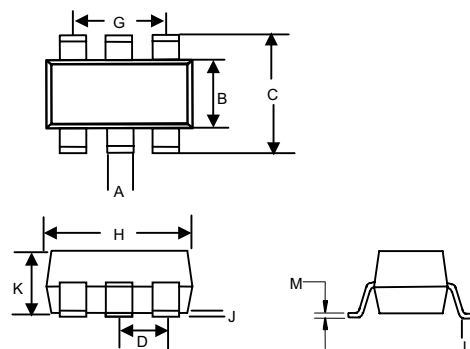
Electrical Characteristics @ $25^\circ C$ Unless Otherwise Specified

Ratings	Symbol	Max.	Notes
Forward Voltage at $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$	V_F	240mV 320mV 400mV 500mV 1000mV	Note 2
Reverse Current	I_R	$2.0\mu A$	$V_R = 25V$
Reverse Breakdown Voltage	$V_{(BR)}$	$>30V$	
Capacitance	C_J	10pF	Measured at 1.0MHz, $V_R = 1.0V$
Reverse Recovery Time	t_{rr}	5.0nS	$I_F = I_R = 10mA$; $I_{REC} = 1mA, R_L = 100\Omega$

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.
2. Short duration test pulse used to minimize self-heating effect

200mWatt, 30Volt Schottky Barrier 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	0.085	0.096	2.15	2.45	
D	0.026 Nominal		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	0.035	0.043	0.90	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

BAT54TW/ADW/CDW/SDW/BRW

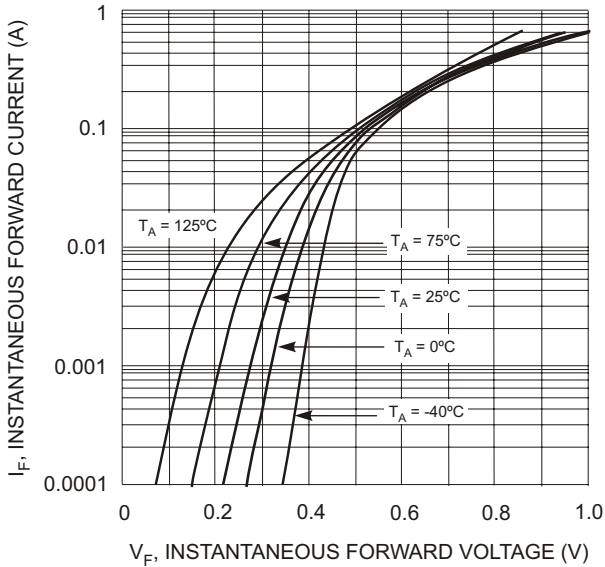


Fig. 1 Forward Characteristics

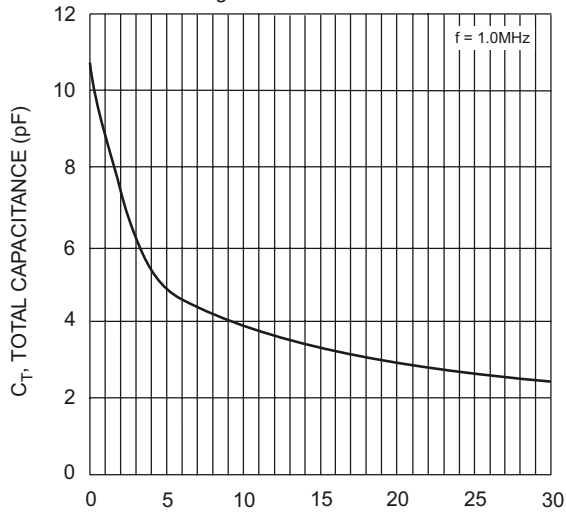


Fig. 3 Typical Capacitance vs. Reverse Voltage

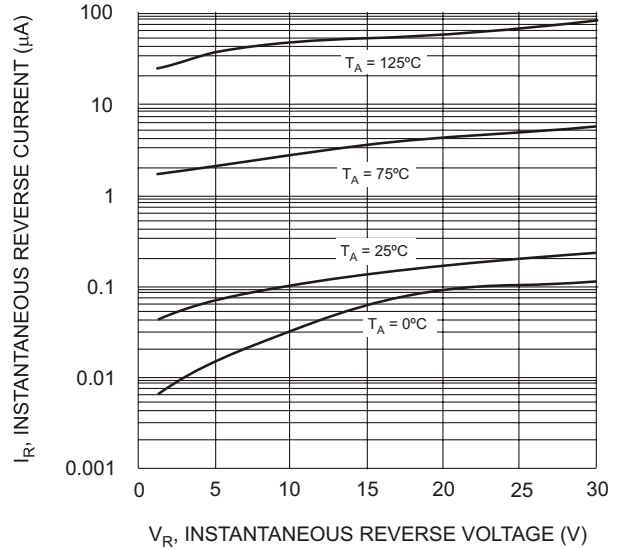


Fig. 2 Typical Reverse Characteristics

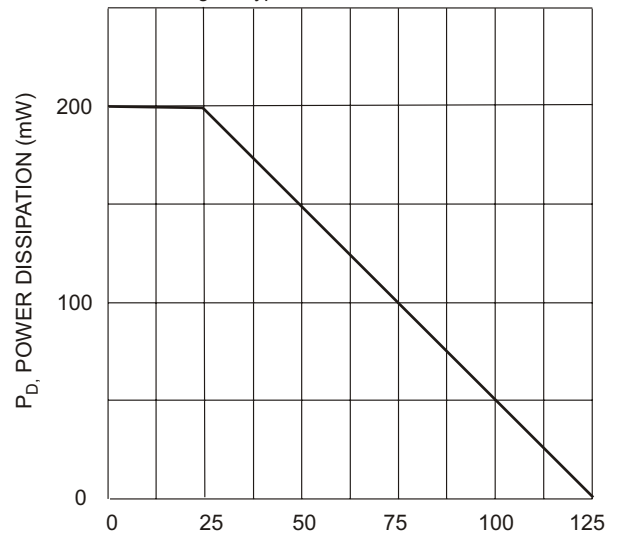
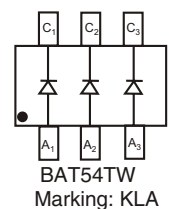
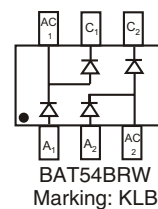
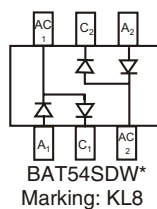
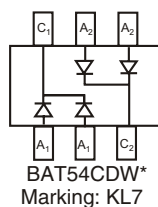
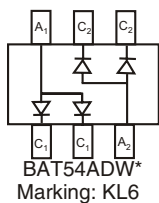


Fig. 4 Power Derating Curve



*Symmetrical configuration, no orientation indicator.



TM

Micro Commercial Components

Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com
