

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

## BAT54M

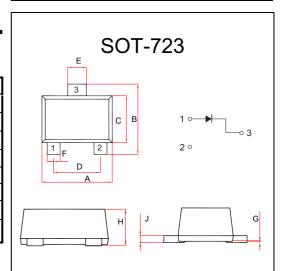
# **Features**

- Extremely Fast Switching Speed
- Low Forward Voltage Drop
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)
- Marking:L1

# **Maximum Ratings**

Peak Repetitive Reverse Voltage	$V_R$	30V
RMS Reverse Voltage	$V_{R(RMS)}$	21V
Average Forward Current	Io	200mA
Repetitive Peak Forward Current @ $t \le 1s$ , $\delta \le 0.5$	$I_{FRM}$	300mA
Non-Repetitive Peak Forward Current@ t=8.3ms	I <sub>FSM</sub>	600mA
Power Dissipation	$P_{D}$	150mW
Storage Temperature Range	T <sub>stg</sub>	-55°C to 125°C
Junction Temperature	$T_{j}$	-55°C to 150°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	667°C/W

# 150mWatt, 30Volt Schottky Barrier Diode



	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	. 045	.049	1.15	1.25	
В	. 045	.049	1.15	1.25	
С	. 0 30	.033	0.75	0.85	
D	.031TYP.		0.	80TYP.	
E	.011	.015	0.27	0.37	
F	.007	.011	0.17	0.27	
G	.000	.002	.000	.050	
Н	.017	.020	0.43	0.50	
J	.003	.006	.080	.150	

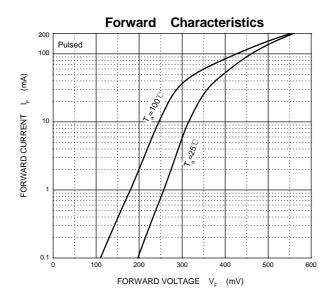
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

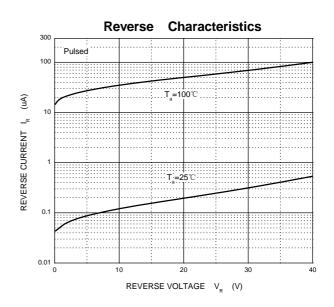
		ı	
Ratings	Symbol	Max.	Notes
Forward Voltage	V <sub>F</sub>	240mV 320mV 400mV 500mV 1000mV	$I_F = 0.1\text{mA}$ $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$
Reverse Current	I <sub>R</sub>	2μΑ	V <sub>R</sub> = 25V
Reverse Breakdown Voltage	$V_{(BR)}$	>30V	I <sub>R</sub> =100μA
Total Capacitance	$C_{tot}$	10pF	Measured at 1.0MHz, V <sub>R</sub> =1.0V
Reverse Recovery Time	t <sub>rr</sub>	5nS	$I_F = I_R = 10$ mA $I_{R(REC)} = 1.0$ mA

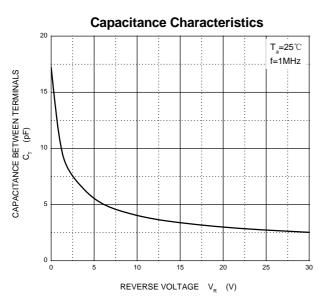
1 of 3

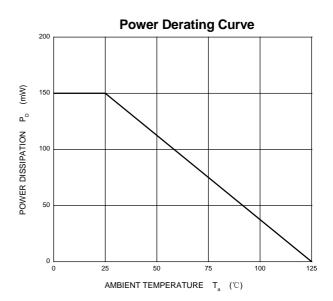


### BAT54M











#### **Ordering Information:**

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/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.