

# Features

- High Speed Switching Application.
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 500°C/W Junction to Ambient

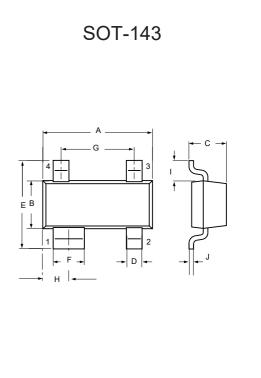
MCC Part Number	Device Marking	Repetitive Peak Reverse Voltage V <sub>RRM</sub>		Continuous Reverse Voltage V <sub>R</sub>
BAS28	JT	85V		75V
Forward Continuous Current	١ <sub>F</sub>	215mA		
Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	4.0A 1.0A 0.5A	t=1us t=1ms t=1s	
Repetitive Peak Forward Curren	I <sub>FRM</sub>	500mA		
Power Dissipation	Pd	250mW		

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:



# High-Speed Double Diode



	INCHES		MM		NOTE
DIM -	MIN	MAX	MIN	MAX	NOTE
Α	0.110	0.120	2.80	3.04	
В	0.047	0.055	1.20	1.39	
С	0.031	0.048	0.80	1.22	
D	0.011	0.020	0.30	0.51	
Е	0.082	0.104	2.10	2.64	
F	0.029	0.037	0.76	0.94	
G	0.070	0.080	1.78	2.03	
Н	0.028	0.033	0.72	0.83	
Ι	0.015	0.024	0.40	0.60	
J	0.003	0.008	0.08	0.20	



# Electrical Characteristics @ 25°C Unless Otherwise Specified

Minimum Reverse Breakdown Voltage	V <sub>BR</sub>	75V	I <sub>R</sub> =100.0μA
Maximum Forward Voltage	V <sub>F</sub>	0.715V 0.855V 1.000V 1.250V	I <sub>F</sub> =1.0mA I <sub>F</sub> =10.0mA I <sub>F</sub> =50.0mA I <sub>F</sub> =100.0mA
Maximum Reverse Current	I <sub>R</sub>	0.03μΑ 1.0μΑ 30μΑ 50μΑ	V <sub>R</sub> =25V V <sub>R</sub> =75V V <sub>R</sub> =25V,T <sub>J</sub> =150°C V <sub>R</sub> =75V,T <sub>J</sub> =150°C
Maximum Forward recovery voltage	V <sub>fr</sub>	1.75V	I <sub>F</sub> =10mA,t <sub>r</sub> =20ns
Maximum Diodes Capacitance	C <sub>d</sub>	1.5pF	V <sub>R</sub> =0.0V,f=1.0MHz
Maximum Reverse Recovery Time	t <sub>rr</sub>	4.0ns	I <sub>F</sub> =10mA, I <sub>R</sub> =10mA I <sub>rr</sub> =0.1*I <sub>R</sub>



# **Curve Characteristics**

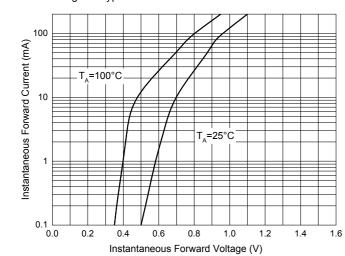
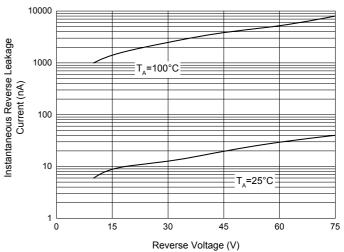
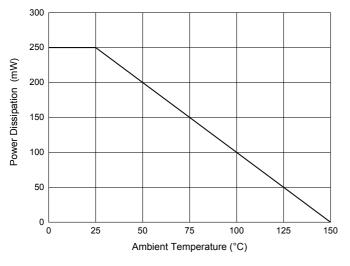


Fig. 1 - Typical Instantaneous Forward Characteristics



#### Fig. 2 - Typical Reverse Leakage Characteristics

Fig. 3 - Power Derating Curve





# **Ordering Information**

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

## \*\*\*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.