



BAT54 SERIES

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volts **CURRENT** 0.2 Amperes

FEATURES

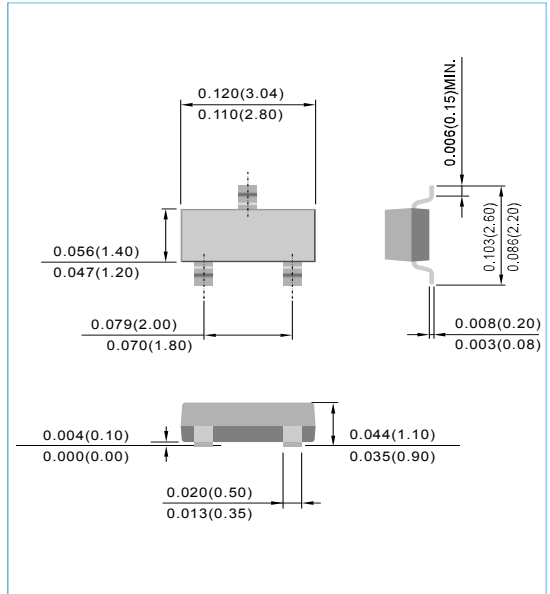
- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams

SOT-23

Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	BAT54	BAT54A	BAT54C	BAT54S	Units
Marking code	-	L4	L42	L43	L44	-
Forward Power Dissipation@ $T_A=25^\circ\text{C}$	P_D	225				mW
Peak Repetitive Reverse Voltage	V_{RRM}	30				V
Maximum Average Forward Current at $T_A=75^\circ\text{C}$	I_O	0.2				A
Repetitive Peak Forward Current($t_p=8.3\text{ms}, 50\%$ Duty Cycle)	I_{FRM}	300				mA
Peak Forward Surge Current, 1.0s (JEDEC method)	I_{FSM}	0.6				A
Maximum Instantaneous Forward Voltage @ $I_F=1\text{mA}$ @ $I_F=100\text{mA}$	V_F	0.32 0.8				V
Maximum DC Reverse Current at Rated DC Blocking Voltage@ $V_R=25\text{V}$	I_R	2.0				μA
Junction Capacitance at $V_R=1\text{V}$	C_J	10				pF
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500				$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 TO +125				$^\circ\text{C}$
Circuit Figure	-	Single	Common Anode	Common Cathode	Series	-

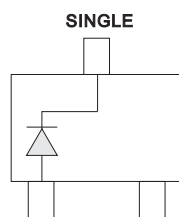


Fig.14

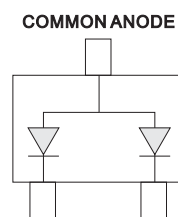


Fig.15

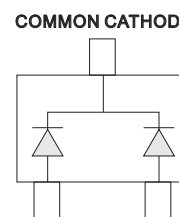


Fig.16

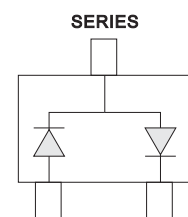


Fig.17



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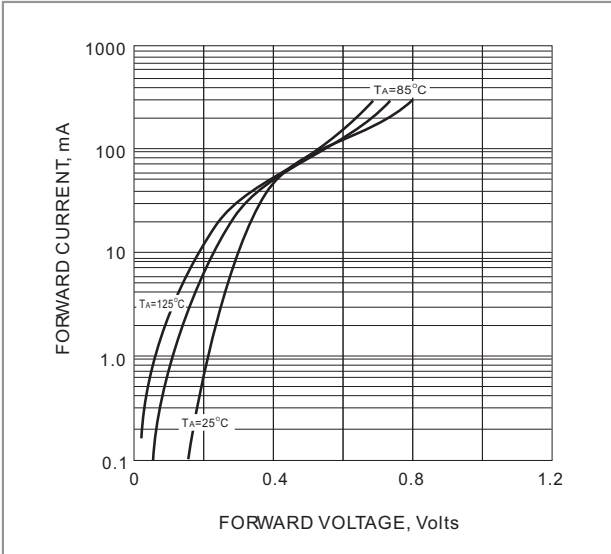


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

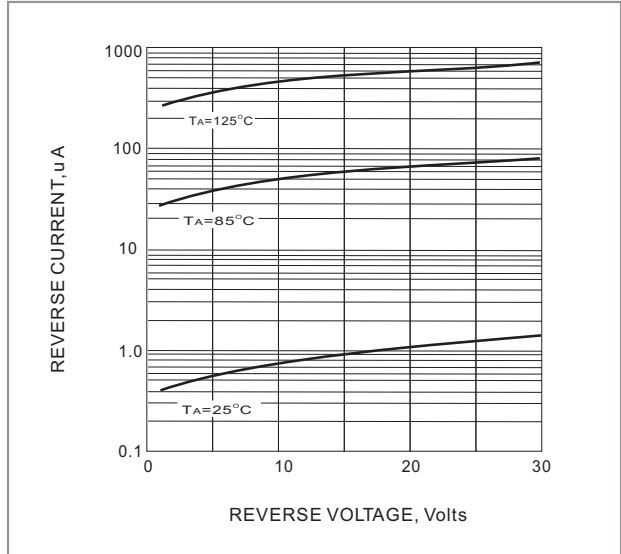


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

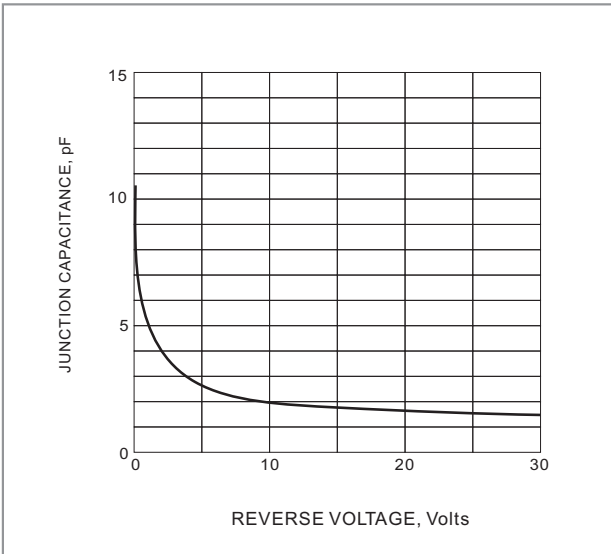


FIG. 3 TYPICAL JUNCTION CAPACITANCE

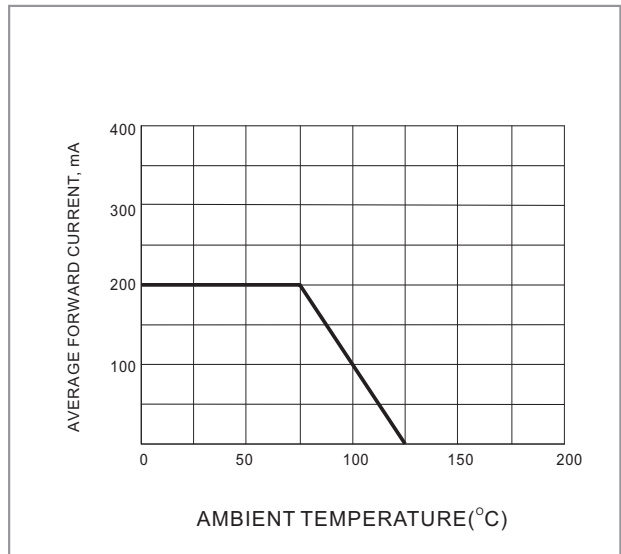
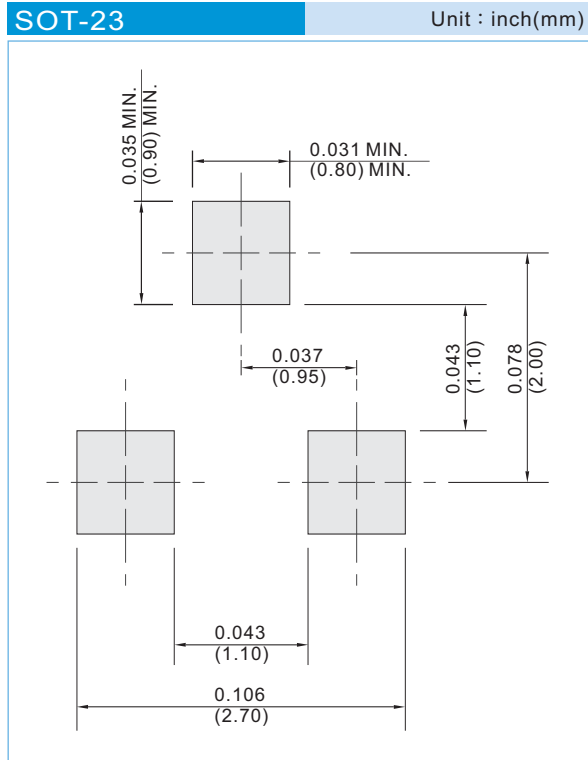


FIG. 4 FORWARD CURRENT DERATING



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



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Part No_packing code_Version

BAT54_R1_00001

BAT54_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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