

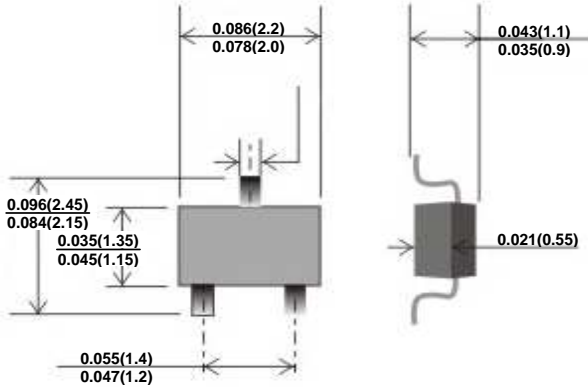


BAS54W SERIES

SURFACE MOUNT SCHOTTKY DIODES

Reverse Voltage - 30 Volts Forward Current - 0.2 Ampere

SOT-323



Dimensions in inches and (millimeters)

FEATURES

- ◆ Fast switching speed
- ◆ Surface mount package Ideally suited for automatic insertion
- ◆ Electrically identical to standard JEDEC
- ◆ High Conductance
- ◆ Lead free in comply with EU RoHS 2002/95/EC directives.
- ◆ Green molding compound as per IEC61249 Std..(Halogen Free)

MECHANICAL DATA

Case: JEDEC SOT-323, Molded plastic

Terminals: Solderable per MIL-STD-750 · Method 2026

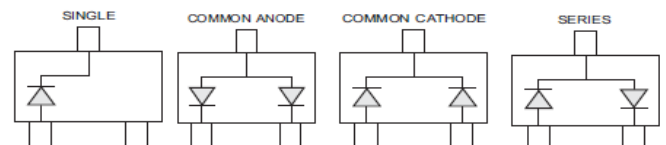
Approx. Weight: 0.0002 ounces, 0.005 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOLS	BAT54W	BAT54AW	BAT54CW	BAT54SW	UNITS
Marking Code		L4	L42	L43	L44	Volts
Forward Power Dissipation @ $T_A = 25^\circ\text{C}$	P_d	200				mW
Peak Repetitive Reverse Voltage	V_{RRM}	30				Volts
Maximum Average Forward Current at $T_A = 75^\circ\text{C}$	I_O	0.2				Amps
Peak Forward Surge Current, at $t=1.0\text{s}$ (JEDEC method)	I_{FSM}	0.6				Amps
Maximum Instantaneous Forward Voltage at $I_F = 1\text{mA}$ at $I_F = 100\text{mA}$	V_F	0.32 1.0				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $V_R = 25\text{V}$	I_R	2.0				μA
Typical Junction Capacitance (Notes 1)	C_J	10.0				pF
Typical Thermal Resistance	$R_{\theta JA}$	635				$^\circ\text{C/W}$
Junction Temperature and Storage Temperature Range	T_J, T_{STG}	-55 ~ +150				$^\circ\text{C}$
Circuit Figure		Single	Common Anode	Common Cathode	Series	

Note: 1. C_J at Reverse Voltage = 1V, $f=1\text{MHz}$





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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- TYPICAL FORWARD CHARACTERISTICS

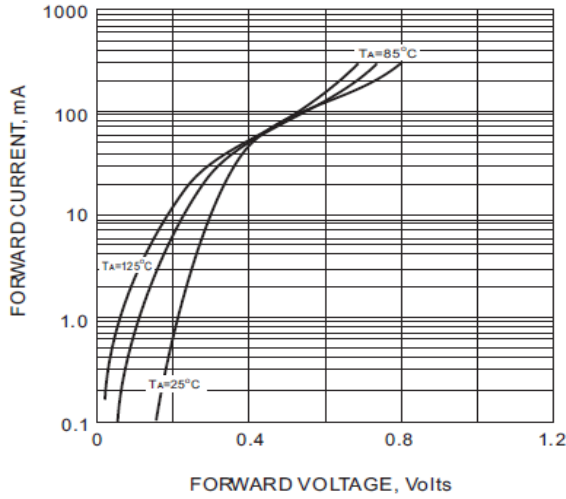


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

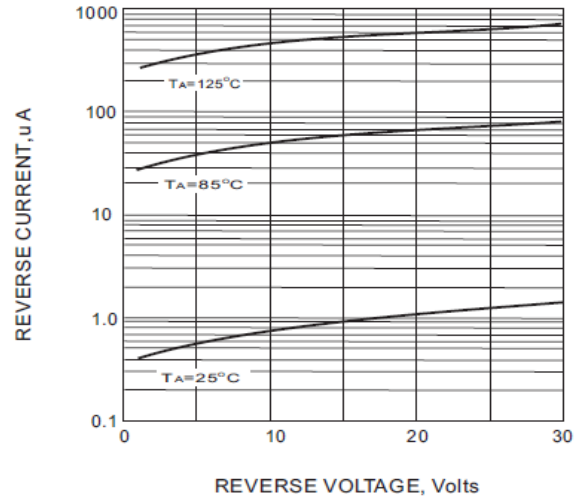


FIG. 3-TYPICAL JUNCTION CAPACITANCE

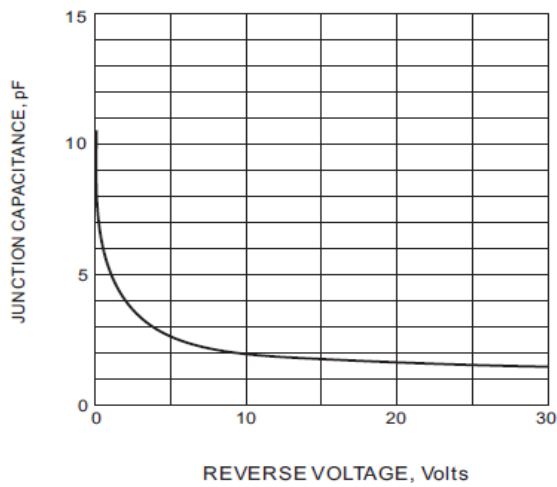
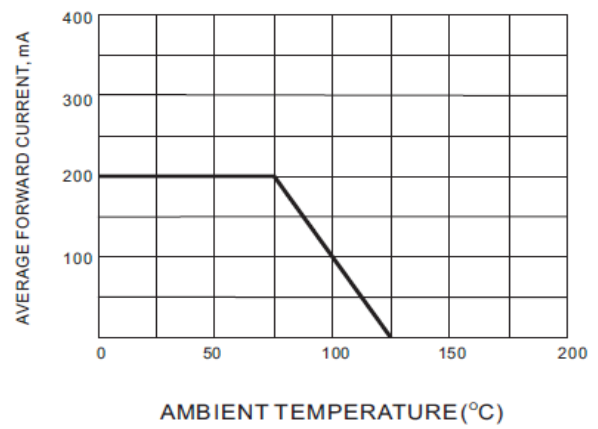


FIG. 4-POWER DERATING CURVE



MOUNTING PAD LAYOUT

Unit: Inch(mm)

