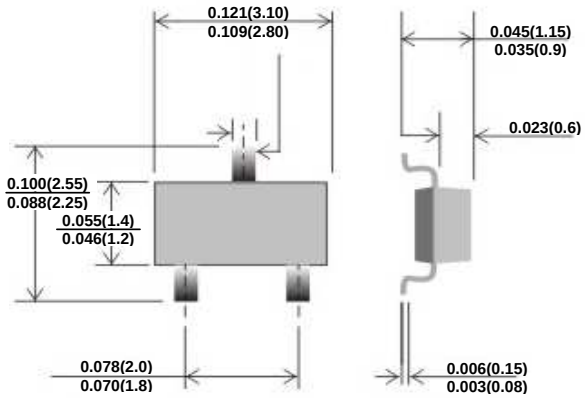
BAS54 SERIES

SURFACE MOUNT SCHOTTKY DIODES

Reverse Voltage - 30 Volts Forward Current - 0.2 Ampere

SOT-23



Dimensions in inches and (millimeters)

FEATURES

- Fast switching speed
- Surface mount package Ideally suited for automatic insertion
- Electrically identical to standerd 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-23, Molded plastic

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

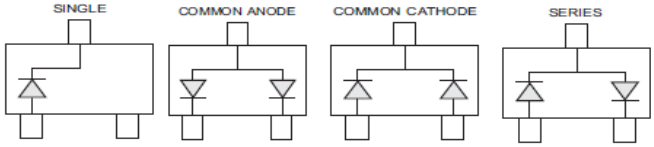
Approx. Weight: 0.0003 ounces, 0.0084 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	*SYMBOLS*	BAT54	BAT54A	BAT54C	BAT54S	UNITS
Marking Code		L4	L42	L43	L44	Volts
Forward Power Dissipation@T_A = 25 °C	Pd	225				mW
Peak Repetitive Reverse Voltage	V_{RRM}	30				Volts
Maximum Average Forward Current at T_A =75 °C	I_O	200				mA
Repetitive Peak Forward Current(tp =8.3 ms , 50 %Duty Cycle)	I_{FRM}	0.3				Amps
Peak Forward Surge Current, at t=1.0s (JEDEC method)	I_{FSM}	0.6				Amps
Maximum Instantaneou Forward Voltage at I_F = 1mA at I_F=100mA	V_F	0.32 0.8				Volts
Maximum DC Reverse Curren at Rated DC Blocking Voltage @ V_R=25V	I_R	2.0				μA
Typical Junction Capacitance (Notes 1)	C_J	10.0				pF
Typical Thermal Resistance	$R_{\theta JA}$	500				℃/W
Junction Temperature and Storage Temperature Range	T_J, T_{STG}	-55 ～ +150				℃
Circuit Figure		Single	Common Anode	Common Cathode	Series	

Note: 1. C_J at Reverse Voltage = 1V, f=1MHz



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- TYPICAL FORWARD CHARTERISTICS

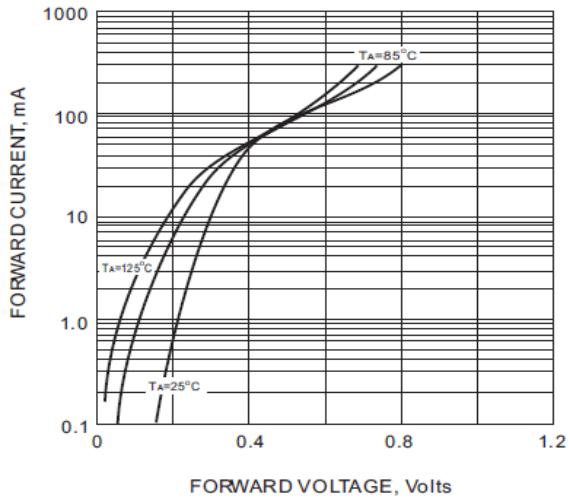


FIG. 2-TYPICAL REVERSE CHARTERISTICS

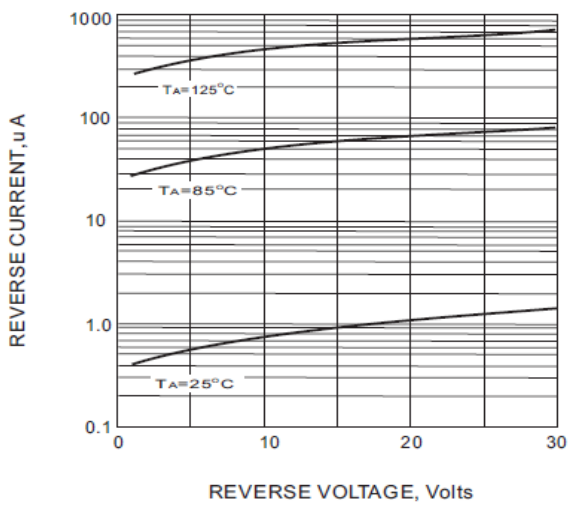


FIG. 3-TYPICAL JUNCTION CAPACITANCE

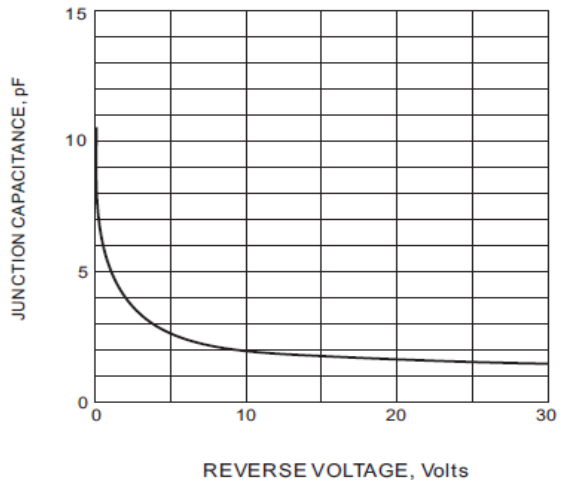
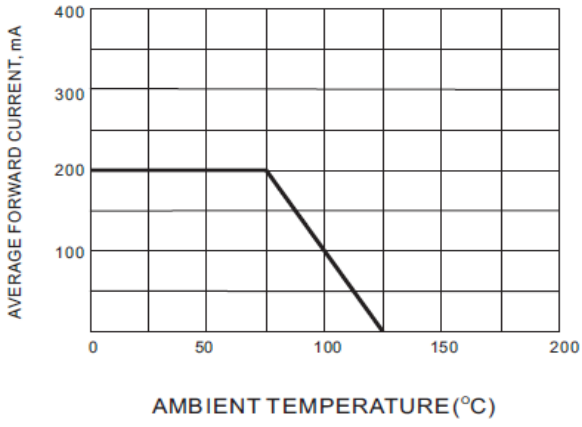


FIG. 4-POWER DERATING CURVE



MOUNTING PAD LAYOUT

Unit: Inch(mm)