Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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Surface Mount Schottky Diode

COMCHIP
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BAT54 Series -G

Voltage: 30 Volts
Current: 200mA

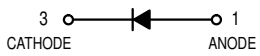
Features

Low Turn-on Voltage
Fast Switching
PN Junction Guard Ring for Transient and ESD Protection

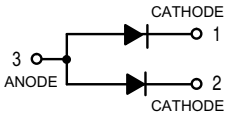
Mechanical data

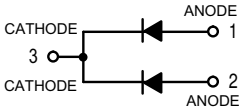
Case: SOT-23, Molded Plastic
Terminals: Solderable per MIL-STD-202, Method 208
Polarity: See Diagrams Below
Weight: 0.008 grams (approx.)
Mounting Position: Any

BAT54-G



BAT54A-G





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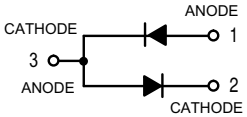
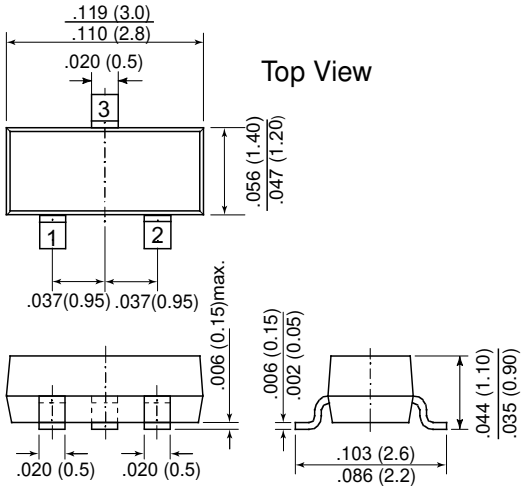


BAT54S-G

SOT-23



Dimensions in inches (millimeters)

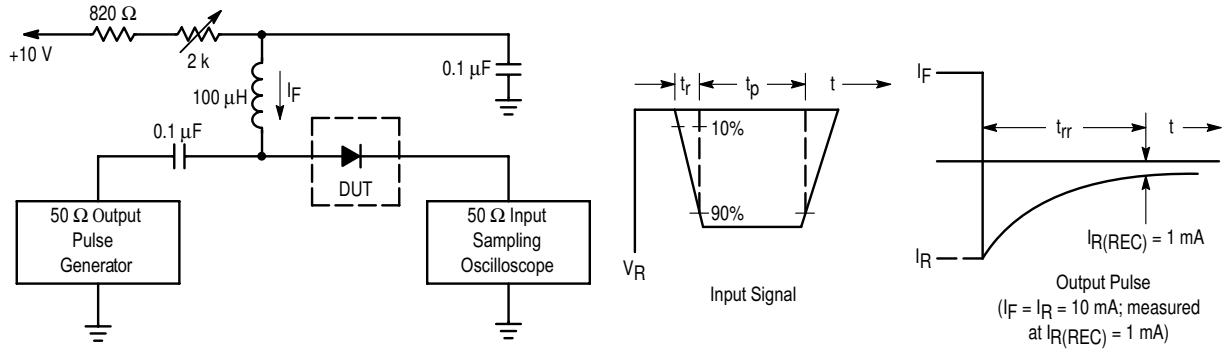
Maximum Ratings (T_A = 125°C unless otherwise noted)

Rating	Symbol	Value	Units
Reverse Voltage	V_R	30	Volts
Forward Power Dissipation @ TA = 25°C Derate above 25°C	P_F	225 1.8	mW mW/°C
Forward Current (DC)	I_F	200 Max	mA
Junction Temperature	T_J	125 Max	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

Electrical Characterics (T_A = 25°C unless otherwise noted) (EACH DIODE)

Parameter	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage (IR = 10 mA)	$V_{(BR)R}$	30	—	—	Volts
Total Capacitance (VR = 1.0 V, f = 1.0 MHz)	C_T	—	7.60	10.0	pF
Reverse Leakage (VR = 25 V)	I_R	—	0.50	2.0	mAdc
Forward Voltage (IF = 0.1 mAdc) (IF = 30 mAdc) (IF = 100 mAdc)	V_F	—	0.22 0.41 0.52	0.24 0.5 1.0	Vdc
Reverse Recovery Time (IF = IR = 10 mAdc, IR(REC) = 1.0 mAdc) Figure 1	t_{rr}	—	—	5.0	ns
Forward Voltage (IF = 1.0 mAdc) (IF = 10 mAdc)	V_F	—	0.29 0.35	0.32 0.40	Vdc
Forward Current (DC)	I_F	—	—	200	mAdc
Repetitive Peak Forward Current	I_{FRM}	—	—	300	mAdc
Non–Repetitive Peak Forward Current (t < 1.0 s)	I_{FSM}	—	—	600	mAdc

RATING AND CHARACTERISTIC CURVES (BAT54 Series-G)



Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

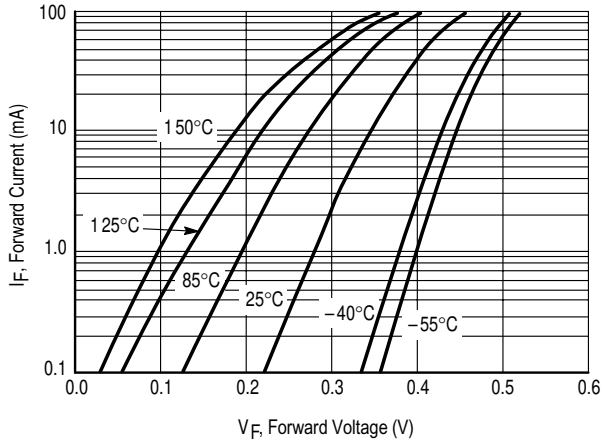


Figure 2. Forward Voltage

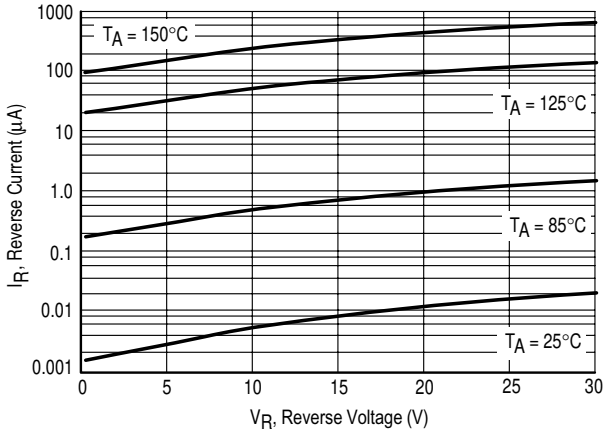


Figure 3. Leakage Current

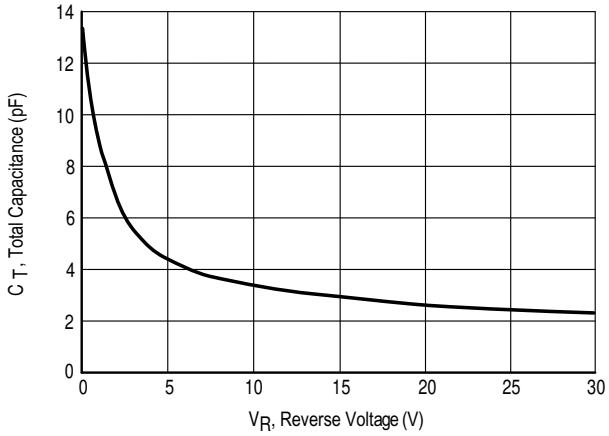


Figure 4. Total Capacitance