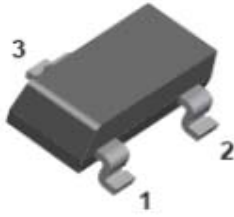


Schottky Barrier Diode



Features

- Epoxy meets UL-94 V-0 flammability rating, halogen-free
- Moisture Sensitivity Level 1
- Low Forward Voltage
- Surface Mount device

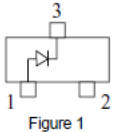


Figure 1

BAT54

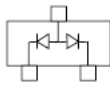


Figure 2

BAT54A

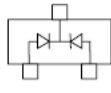


Figure 3

BAT54C

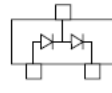


Figure 4

BAT54S

Marking

BAT54	KL1
BAT54A	KL2
BAT54C	KL3
BAT54S	KL4

■Maximum Rating, ($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Value
Continuous Reverse Voltage	V_R	V	30
Maximum RMS Voltage	V_{RMS}		21
Forward Continuous Current	I_F	mA	200
Non-Repetitive Peak Forward Surge Current @ $t < 1\text{s}$	I_{FSM}	A	0.6
Total Power Dissipation @ $T_A=25^{\circ}\text{C}$	P_D	mW	200
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	500
Junction Temperature	T_J	$^{\circ}\text{C}$	-55 to +125
Storage temperature range	T_{stg}	$^{\circ}\text{C}$	-55 to +125

■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54	F2	Approximate 0.008	3000	30000	120000	7" reel
BAT54A	F2	Approximate 0.008	3000	30000	120000	7" reel
BAT54C	F2	Approximate 0.008	3000	30000	120000	7" reel
BAT54S	F2	Approximate 0.008	3000	30000	120000	7" reel

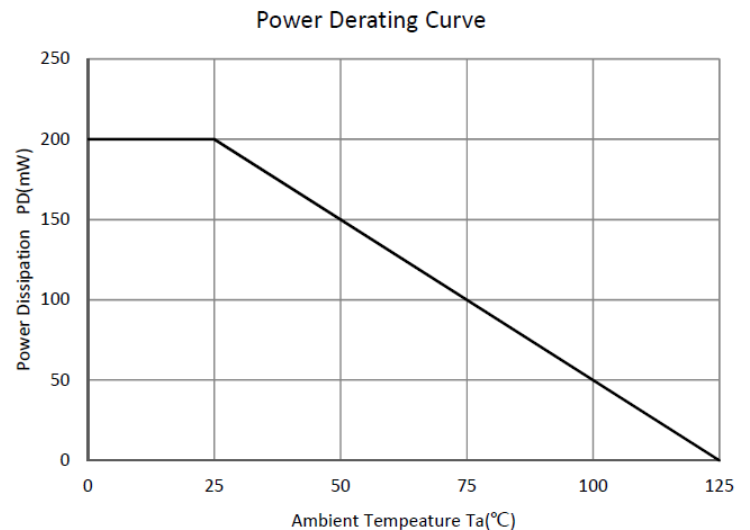
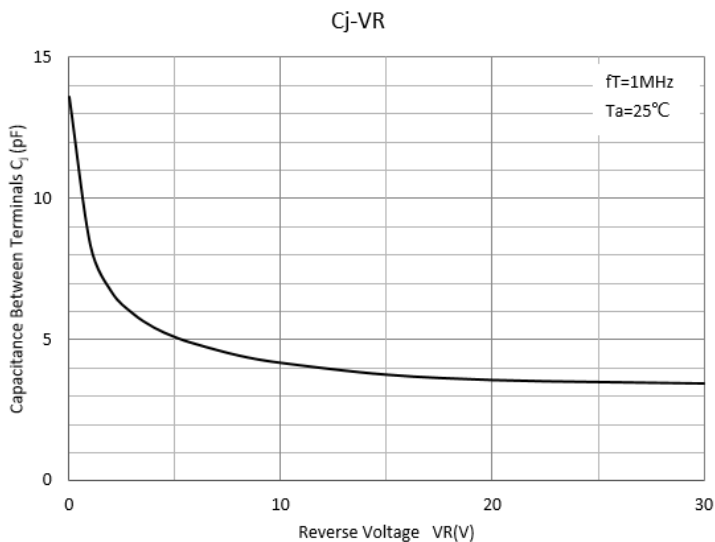
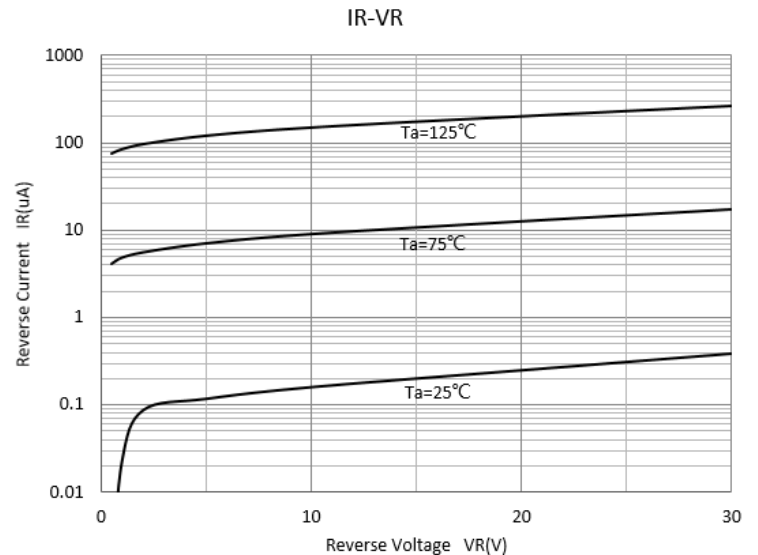
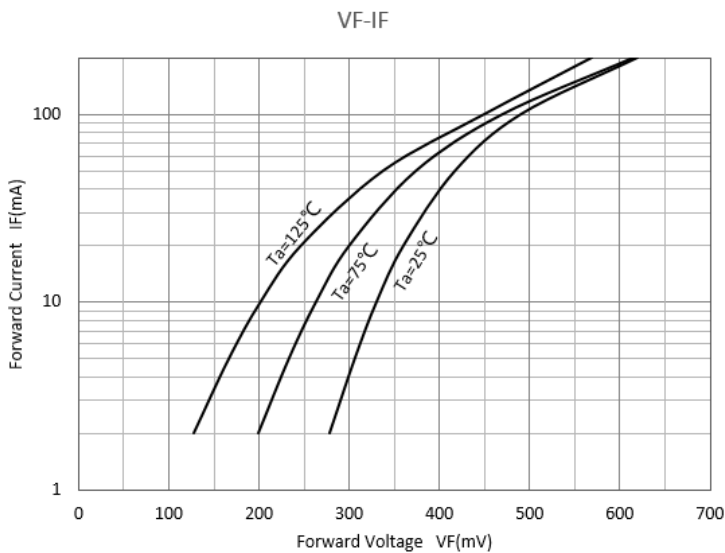


BAT54 THRU BAT54S

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Minimum Breakdown Voltage	V _R	V	I _R =0.1mA	30
Maximum Instantaneous Forward Voltage	V _F	V	I _{FM} =0.1mA	0.24
			I _{FM} =1mA	0.32
			I _{FM} =10mA	0.4
			I _{FM} =30mA	0.5
			I _{FM} =100mA	1
Maximum DC Reverse Current	I _R	uA	V _R =25V	2
Typical Junction Capacitance	C _J	pF	f=1.0MHz, V _R =1.0V	10
Reverse Recovery Time	T _{rr}	ns	I _F =I _R =10mA, I _(REC) =1mA	5

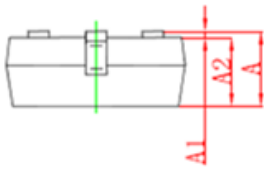
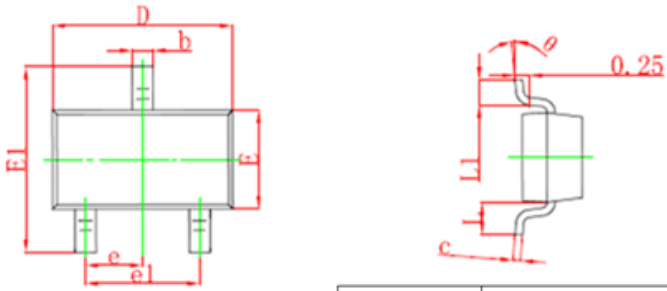
■ Typical Characteristics





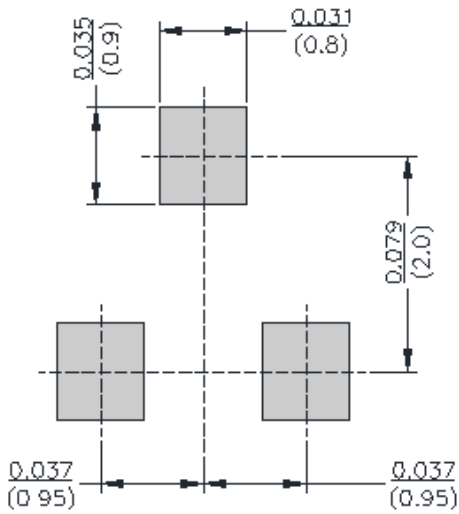
BAT54 THRU BAT54S

■SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°		8°	

■SOT-23 Soldering Footprint





BAT54 THRU BAT54S

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