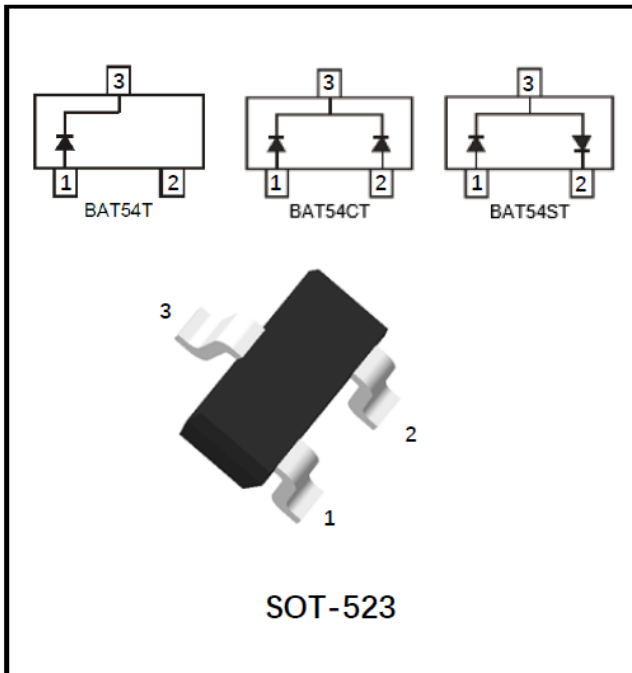


Schottky Barrier Diode



Features

- Low Forward Voltage Drop
- Surface mount package ideally Suited for Automatic Insertion
- Epoxy meets UL-94 V-0 flammability rating, halogen-free

Mechanical Data

- **Package:** SOT-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:**

BAT54T	L1
BAT54CT	L3
BAT54ST	L4

■Maximum Ratings (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Value
Reverse Voltage	V_R	V	30
Forward Continuous Current	I_F	mA	200
Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	I_{FSM}	mA	600
Power Dissipation	P_D	mW	150
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	°C/W	667
Operation Junction Temperature	T_J	°C	125
Storage Temperature	T_{STG}	°C	-55 to +125



BAT54T THRU BAT54ST

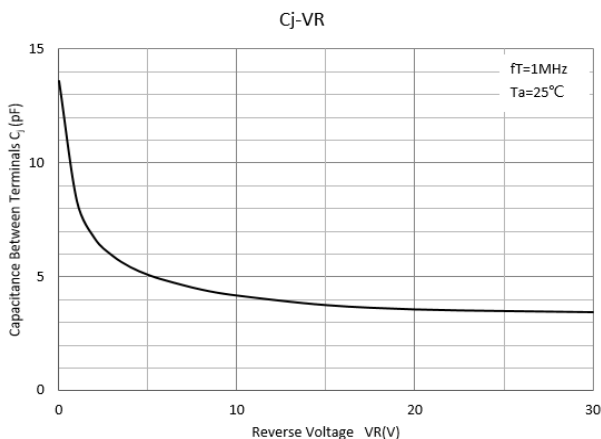
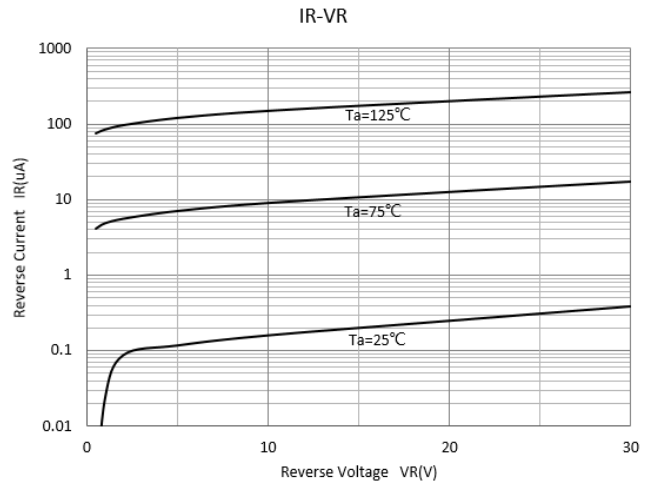
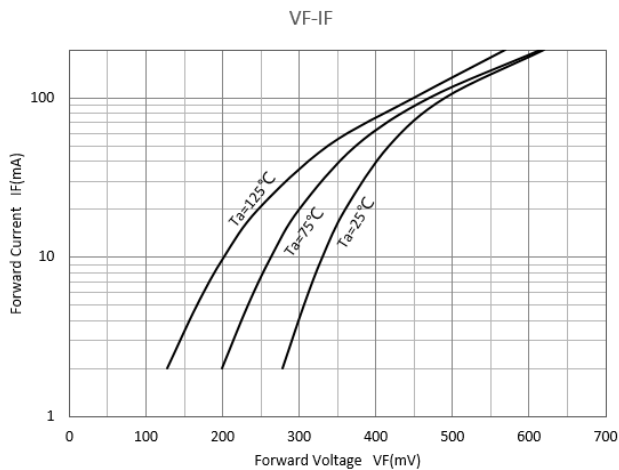
■ Electrical Characteristics (Ta=25°C unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	V_R	V	$I_R=100\mu A$	30
Maximum Instantaneous Forward Voltage	V_F	V	$I_F=0.1mA$	0.24
			$I_F=1mA$	0.32
			$I_F=10mA$	0.4
			$I_F=30mA$	0.5
			$I_F=100mA$	1
Maximum DC Reverse Current	I_R	μA	$V_R=25V$	2
Typical Junction Capacitance	C_J	pF	$f=1.0MHz, V_R=1V$	10
Reverse Recovery Time	T_{rr}	ns	$I_F=I_R=10mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$	5

■ Ordering Information (Example)

Prefered P/N	Packing Code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
BAT54T THRU BAT54ST	F2	Approximate 0.0027	3000	30000	120000	7" reel

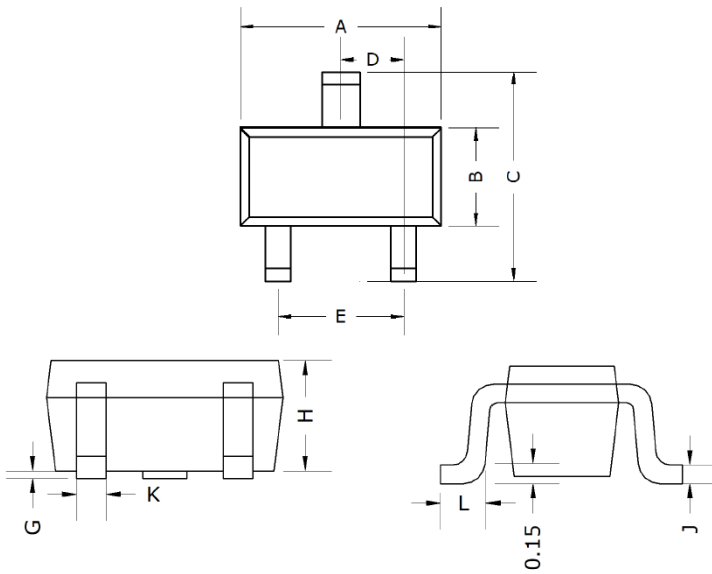
■ Characteristics (Typical)





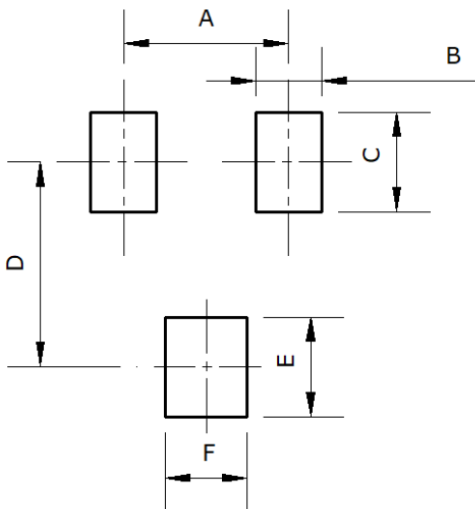
BAT54T THRU BAT54ST

■ SOT-523 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.50	1.70
B	0.030	0.033	0.75	0.85
C	0.057	0.069	1.45	1.75
D	0.020TYP		0.50TYP	
E	0.035	0.043	0.90	1.10
G	0.000	0.004	0.00	0.10
H	0.024	0.031	0.60	0.80
J	0.004	0.008	0.10	0.20
K	0.006	0.014	0.15	0.35
L	0.010	0.018	0.26	0.46

■ SOT-523 Suggested Pad Layout



DIMENSIONS	
DIM	MM (TYP)
A	1.00
B	0.40
C	0.60
D	1.24
E	0.60
F	0.50



BAT54T THRU BAT54ST

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