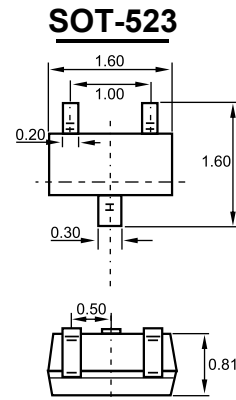




Features

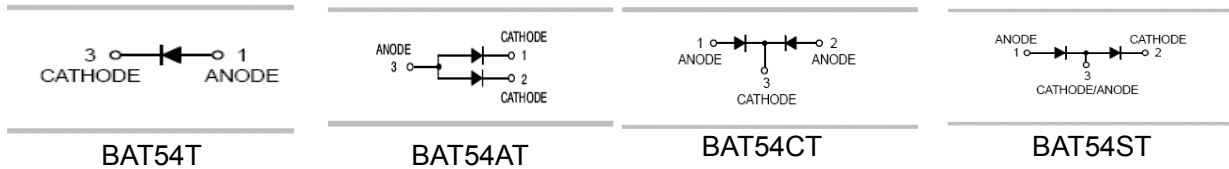
- ✧ Low forward voltage drop.
- ✧ Fast switching.
- ✧ Ultra-small surface mount package.
- ✧ PN junction guard ring for transient and
- ✧ ESD protection.



Applications

- ✧ Schottky barrier diodes.

Dimensions in inches and (millimeters)



Ordering Information

Type No.	Marking	Package Code
BAT54T	L1	SOT-523
BAT54AT	L2	SOT-523
BAT54CT	L3	SOT-523
BAT54ST	L4	SOT-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V_{RRM}	Peak repetitive reverse voltage	30	V
V_{RWM}	Working peak reverse voltage		
V_R	DC reverse voltage		
I_F	Forward continuous voltage	200	mA
I_{FRM}	Repetitive peak forward voltage	300	mA
I_{FSM}	Non-repetitive peak forward surge current @t<1.0s	600	mA
P_d	Power dissipation	150	mW
$R_{\theta JA}$	Thermal resistance junction to ambient	833	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-65~150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	30		V
Leakage current	I_R	$V_R=25V$		2.0	μA
Forward voltage	V_F	$I_F=0.1mA$ $I_F=1.0mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$		240 320 400 500 1000	mV
Typical total capacitance	C_T	$V_R=1.0V, f=1MHz$		10	pF
Reverse recovery Time	t_{rr}	$I_F=I_R=10mA, to I_R=1.0mA R_L=100\Omega$		5.0	ns

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

