



BAT54T / AD / CD / SD/ BR-G

200m Watts Surface Mount Schottky Barrier Diode



SOT- 363

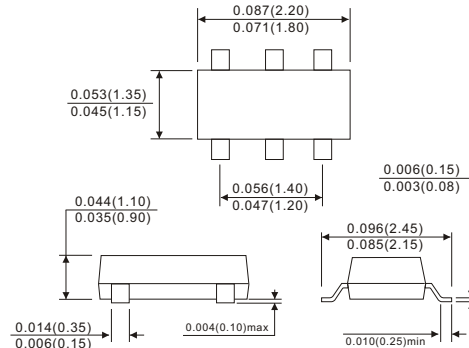


Features

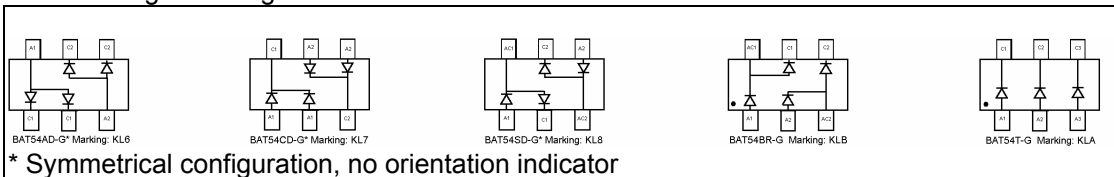
- ✧ Low forward voltage drop
- ✧ Fast switching
- ✧ Ultra-small surface mount package
- ✧ PN junction guard ring for transient and ESD protection
- ✧ Available in lead free version

Mechanical Data

- ✧ Case: SOT-363, Molded plastic
- ✧ Case material: UL 94v-0 flammability retardant classification
- ✧ Terminals: Solderable per MIL-STD-202, Method 208
- ✧ Marking: orientation: See diagrams below
- ✧ Weight: 0.006 gram (approx.)
- ✧ Marking: see diagrams below



Dimensions in inches and (millimeters)



Maximum Ratings $T_A=25^\circ\text{C}$ unless otherwise specified

Type Number	Symbol	Value	Units
Peak Repetitive Reverse Voltage	VRRM	30	V
Working Peak Reverse Voltage	VRWM		
DC Blocking Voltage	VR		
Forward Continuous Current	IF	200	mA
Repetitive Peak Forward Current	IFM	300	mA
Forward Surge Current @ t=1.0s	IFSM	600	mA
Power Dissipation (Note 1)	Pd	200	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to + 125	°C

Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 1)	V _{(BR)R}	30	-	-	V
Reverse Leakage Current (Note 1) VR=25V	I _R	-	--	2.0	uA
Forward Voltage (Note1) IF=0.1mA IF=1.0mA IF= 10mA IF = 30mA IF=100mA	V _F	-	--	240 320 400 500 1000	mV
Junction Capacitance VR=1V, f=1.0MHz	C _j	-	-	10	pF
Reverse Recovery Time (Note 2)	t _{rr}	-	-	5.0	nS

- Notes:
1. Short Duration Pulse Test used to Minimize Self-Heating Effect.
 2. Reverse Recovery Test Conditions: I_F=10mA through I_R=10mA to I_{rr}=1.0mA, R_L=100Ω.

RATINGS AND CHARACTERISTIC CURVES (BAT54T/AD/CD/SD/BR-G)

Fig.1 Forward Characteristics

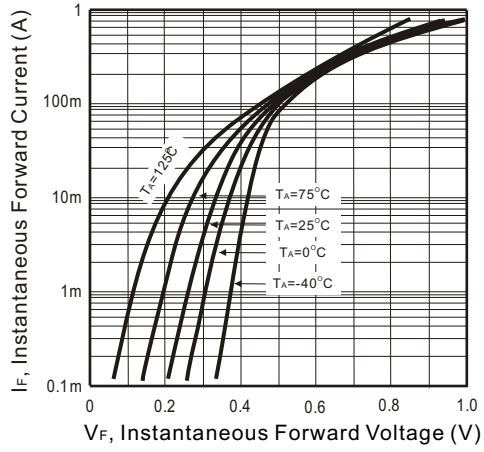


Fig.2 Reverse Characteristics

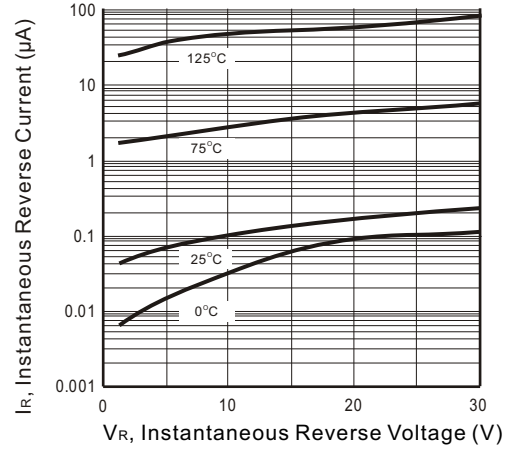


Fig.3 Capacitance Between Terminals Characteristics

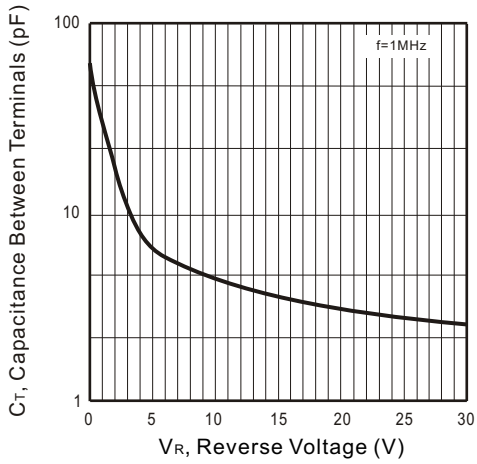
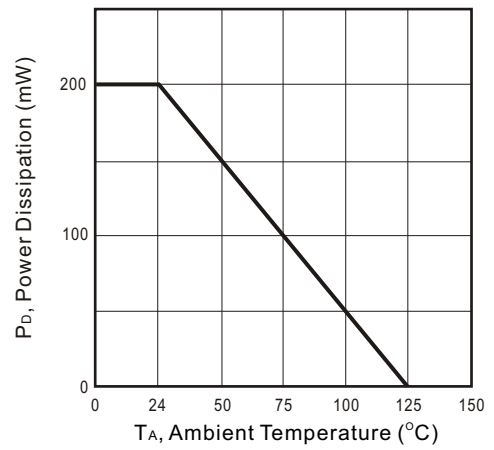


Fig.4 Power Derating Curve



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