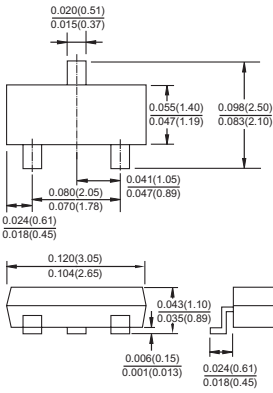



Surface Mount Schottky Barrier Diode

<p>Features</p> <ul style="list-style-type: none"> ✧ Low turn-on voltage ✧ Fast switching ✧ PN junction guard ring for transient and ESD protection <p>Mechanical Data</p> <ul style="list-style-type: none"> ✧ Case: SOT-23, Molded plastic ✧ Terminals: Solderable per MIL-STD-202, Method 208 	<p style="text-align: center;">SOT-23</p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
	

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	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	$^{\circ}\text{C}$

Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 1)	V(BR)R	30	-	-	V
Reverse Leakage Current (Note 1) $V_R=25\text{V}$	IR	-	-	2.0	μA
Forward Voltage (Note 1)	VF	-	-	240	mV
IF=0.1mA				320	
IF=1.0mA				400	
IF=10mA				500	
IF=30mA				1000	
Junction Capacitance $V_R=0, f=1.0\text{MHz}$	Cj	-	-	10	pF
Reverse Recovery Time (Note 2)	trr	-	-	5.0	nS

Notes: 1. Short Duration Pulse Test used to Minimize Self-Heating Effect.

2. Reverse Recovery Test Conditions: IF=10mA through IR=10mA to IR=1.0mA, RL=100 Ω .

RATINGS AND CHARACTERISTIC CURVES (BAT54 / A / C / S)

FIG.1- POWER DERATING CURVE

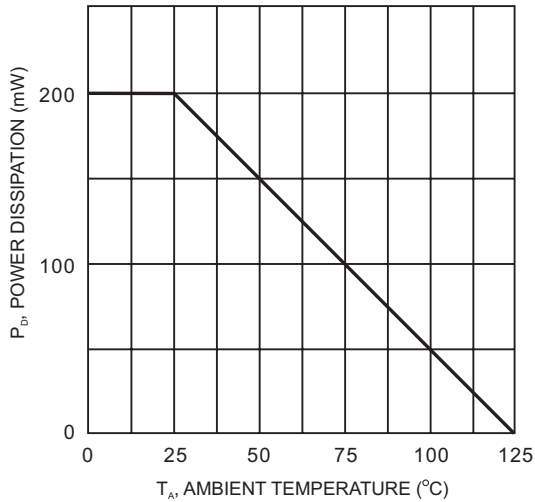


FIG.2- TYPICAL FORWARD CHARACTERISTICS

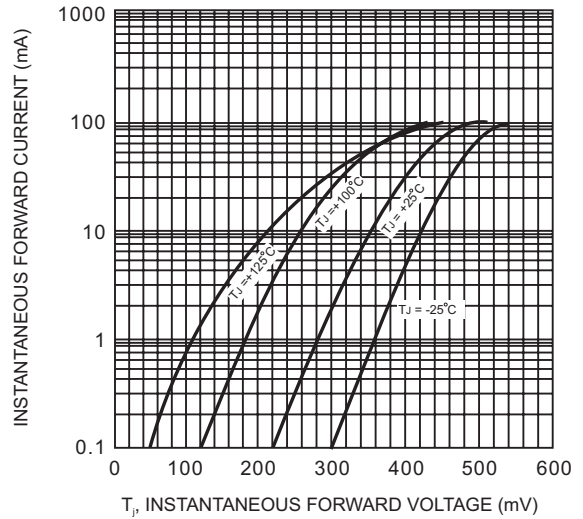


FIG.3- TYPICAL REVERSE CHARACTERISTICS

