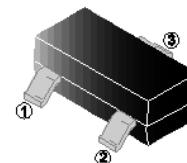


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Forward Voltage
- Fast Switching

SOT-323



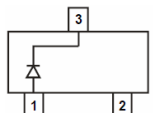
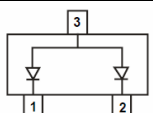
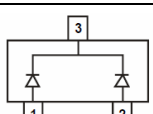
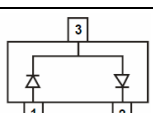
MECHANICAL DATA

- Case: SOT-323, Molded Plastic
- Terminals: solderable per MIL-STD-202, Method 208
- Lead (Pb)-free and Halogen-free

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-323	3K	7 inch

ORDER INFORMATION

Part Number	Equivalent Circuit	Marking
BAT54W-C		KL5 / L4
BAT54AW-C		KL6 / L42
BAT54CW-C		KL7 / L43
BAT54SW-C		KL8 / L44

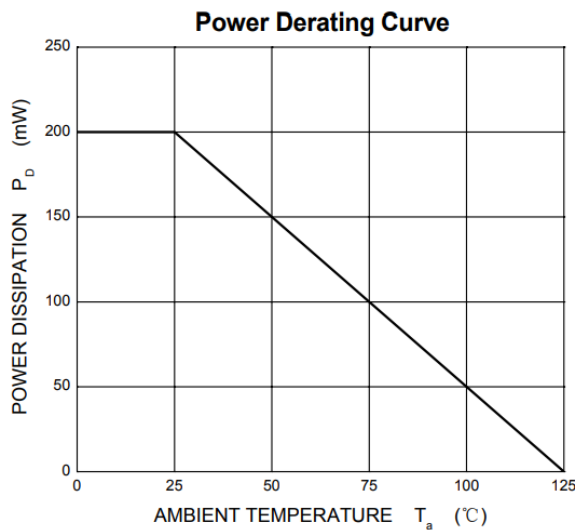
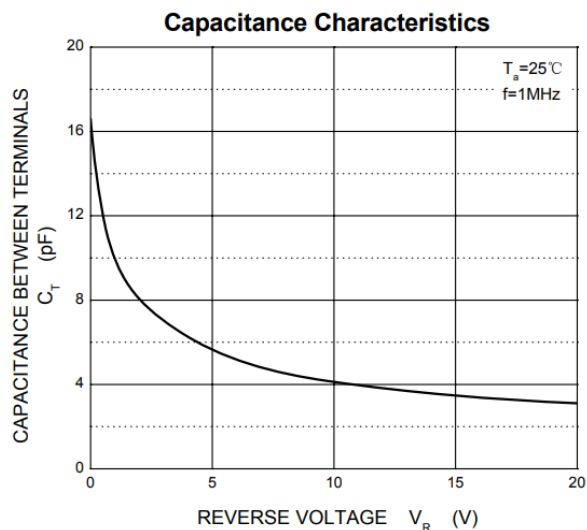
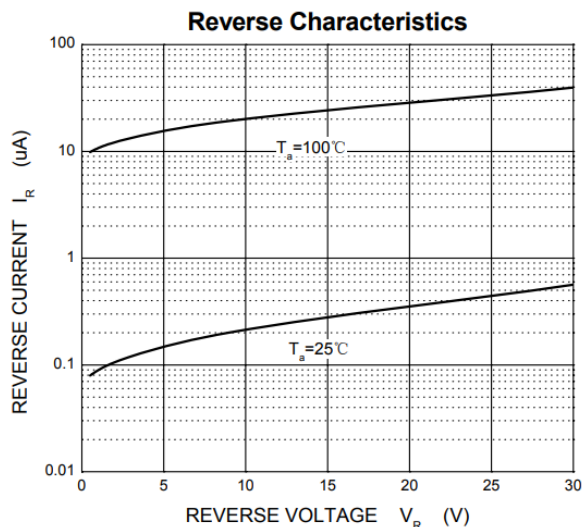
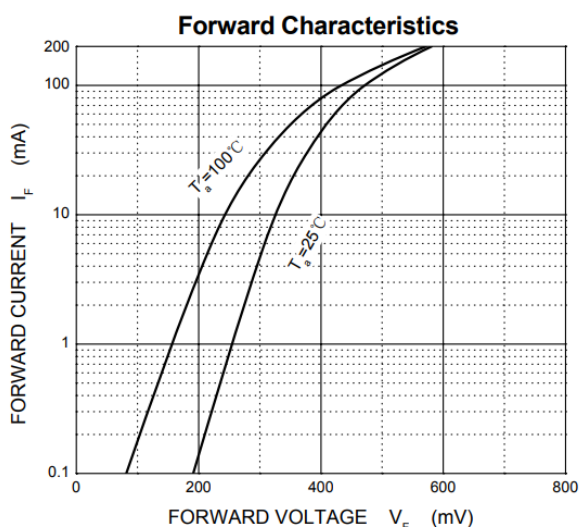
ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}	30	
DC Reverse Voltage	V_{DC}	30	
Forward Continuous Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	600	
Repetitive Peak Forward Current @ $t \leq 1\text{s}, \delta \leq 0.5$	I_{FRM}	300	
Power Dissipation	P_D	200	mW
Thermal Resistance Junction-Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~150	

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

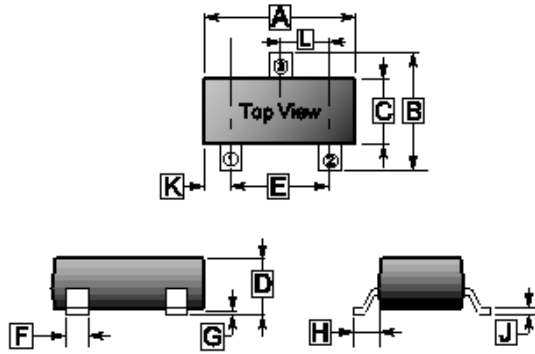
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Voltage	V_{BR}	30	-	-	V	$I_R=100\mu\text{A}$
Reverse Current	I_R	-	-	2	μA	$V_R=25\text{V}$
Forward Voltage	V_F	-	-	0.24	V	$I_F=0.1\text{mA}$
		-	-	0.32		$I_F=1\text{mA}$
		-	-	0.4		$I_F=10\text{mA}$
		-	-	0.5		$I_F=30\text{mA}$
		-	-	1		$I_F=100\text{mA}$
Diode Capacitance	C_D	-	10	-	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse Recovery Time	T_{rr}	-	5	-	nS	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$

RATINGS AND CHARACTERISTIC CURVES



PACKAGE OUTLINE DIMENSIONS

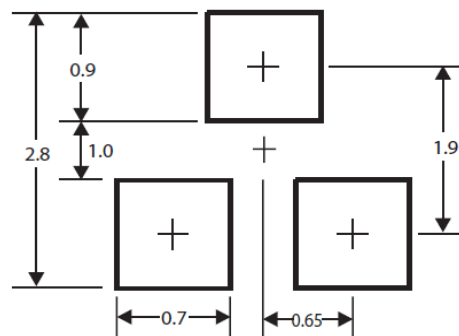
SOT-323



REF.	Millimeter	
	Min.	Max.
A	1.80	2.20
B	1.80	2.55
C	1.10	1.40
D	0.80	1.15
E	1.20	2.00
F	0.15	0.50
G	0.10 REF.	
H	0.525 REF.	
J	0.05	0.25
K	0.35 REF.	
L	0.65 TYP.	

MOUNTING PAD LAYOUT

SOT-323



*Dimensions in millimeters