

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

### FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free
- AEC-Q101 Qualified
- Extremely Fast Switching Speed

### MARKING

JV

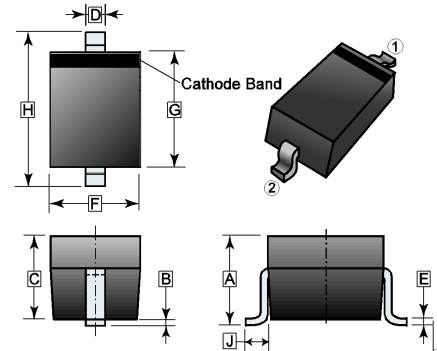
### PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

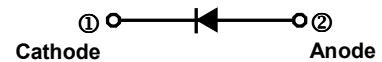
### ORDER INFORMATION

Part Number	Type
BAT54WSCR-C	Lead (Pb)-free and Halogen-free

### SOD-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05 REF.		F	1.15	1.45
B	0.20 REF.		G	1.6	1.9
C	0.80	1.00	H	2.30	2.75
D	0.25	0.40	J	0.475 REF.	
E	0.080	0.20			



### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=125°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Reverse Voltage	V <sub>R</sub>	30	V
Forward Current	I <sub>F</sub>	200	mA
Total Device Dissipation	FR-5 Board <sup>1</sup> @T <sub>A</sub> =25°C	200	mW
	Derate above 25°C	2	mW/°C
Thermal Resistance Junction-Ambient <sup>1</sup>	R <sub>θJA</sub>	500	°C/W
Junction & Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-55~125	°C

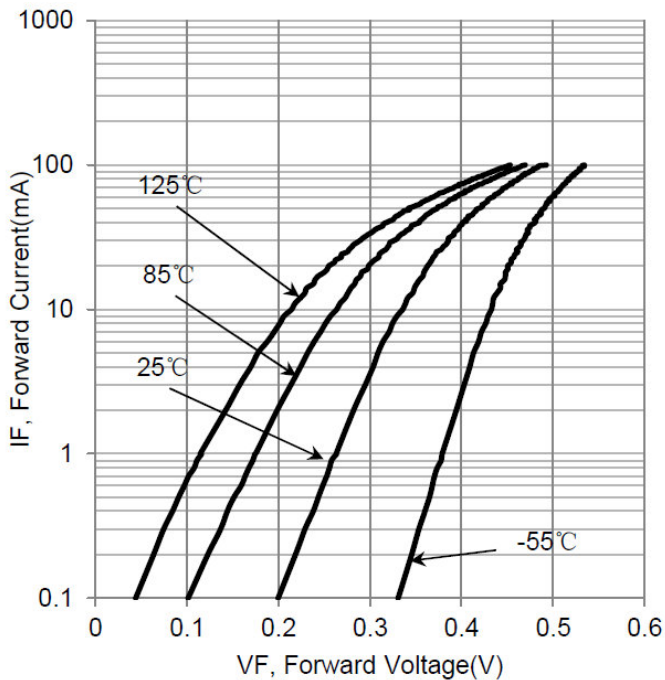
Note:

- FR-5=1.0×0.75×0.062 in.

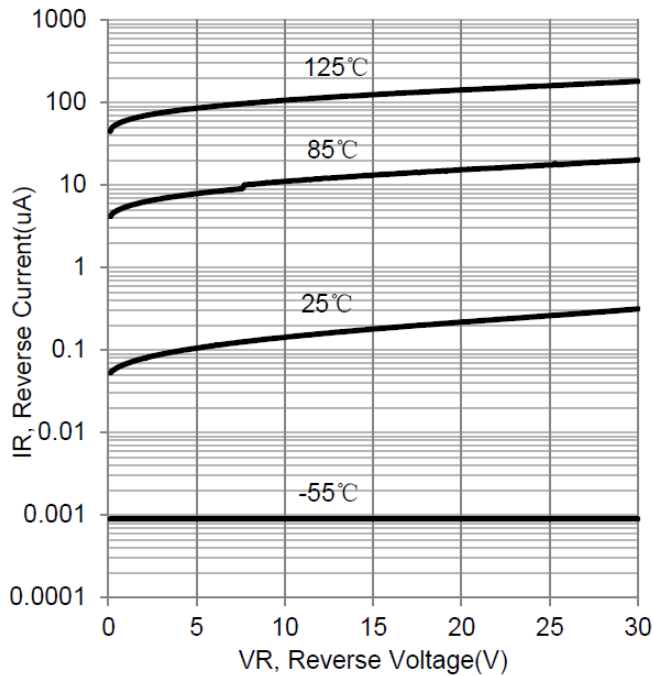
### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V <sub>BR</sub>	30	-	-	V	I <sub>R</sub> =10μA
Reverse Voltage Leakage Current	I <sub>R</sub>	-	0.5	2	μA	V <sub>R</sub> =25V
Diode Capacitance	C <sub>T</sub>	-	-	10	pF	V <sub>R</sub> =1V, f=1MHz
Forward Voltage	V <sub>F</sub>	-	0.22	0.24	V	I <sub>F</sub> =0.1mA
		-	0.29	0.32		I <sub>F</sub> =1mA
		-	0.35	0.4		I <sub>F</sub> =10mA
		-	0.41	0.5		I <sub>F</sub> =30mA
		-	0.52	1		I <sub>F</sub> =100mA
Revers Recovery Time	t <sub>rr</sub>	-	-	5	nS	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>R(REC)</sub> =1mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	-	-	300	mA	
Non-Repetitive Peak Forward Current	I <sub>FSM</sub>	-	-	600	mA	t<1s

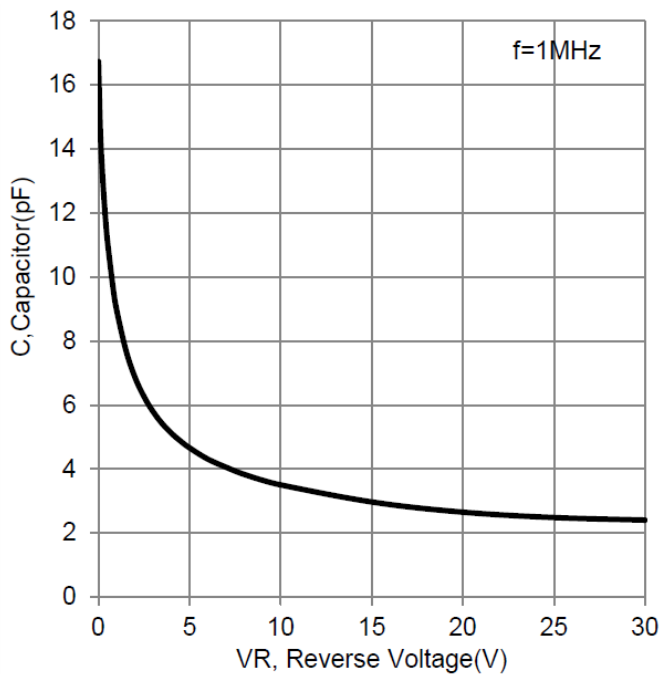
**RATINGS AND CHARACTERISTIC CURVES**



Forward Characteristics



Reverse Characteristics



Capacitor Characteristics