

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

## FEATURES

- High efficiency
- Low forward voltage drop
- Low reverse current

## MECHANICAL DATA

- Case: SOD-323T molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: Any

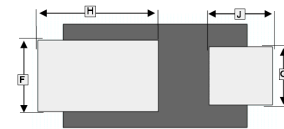
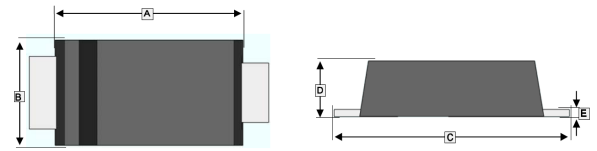
## MARKING

EV

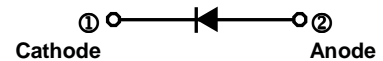
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323T	5K	7 inch

### SOD-323T



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.75	1.95	F	0.65	0.95
B	1.20	1.40	G	0.45	0.75
C	2.30	2.70	H	1.15	1.55
D	0.55	0.75	J	0.40	0.80
E	0.10	0.20			



## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified.)

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum Average Rectified Forward Current	I <sub>F</sub>	1	A
Peak Forward Surge Current@ half sine-wave, 1 cycle, non-repetitive	I <sub>FSM</sub>	22	A
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	150, -40 ~ 150	°C

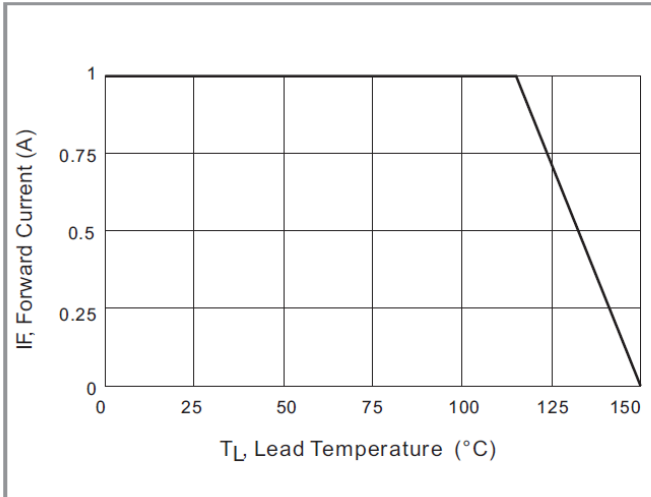
## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified.)

Parameter	Symbol	Rating			Unit	
		Min.	Typ.	Max.		
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =0.7A	-	0.48	V	
		I <sub>F</sub> =1A	-	0.53		0.58
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	0.5	μA	
		V <sub>R</sub> =40V	-	-		100
Typical Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	(See Note 1)	-	-	220	°C/W
		(See Note 2)	-	-	250	
Typical Thermal Resistance from Junction to Lead <sup>1</sup>	R <sub>θJL</sub>	-	-	-	50	°C/W

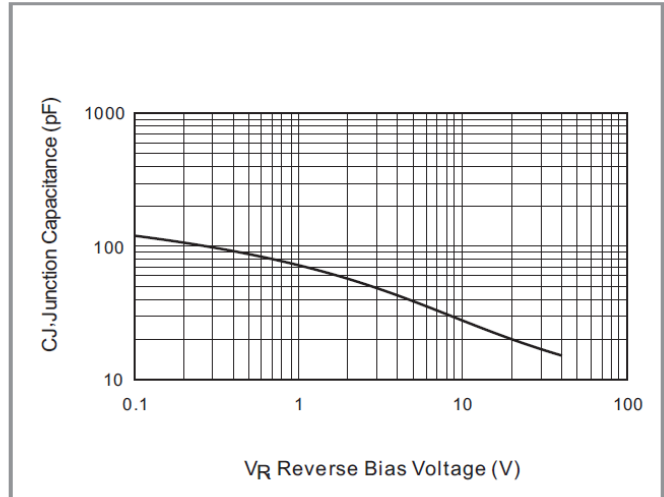
Notes:

1. Mounted on a PCB with 15 mm x 50mm copper pad area.
2. Mounted on a FR-4 PCB with single-sided copper and a mini pad.

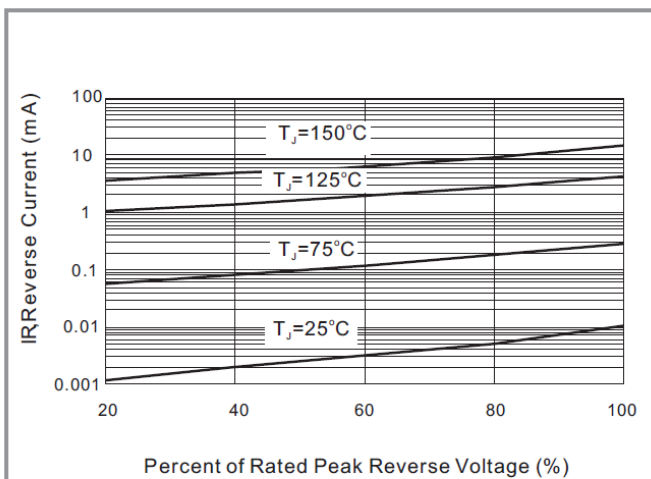
**CHARACTERISTIC CURVES**



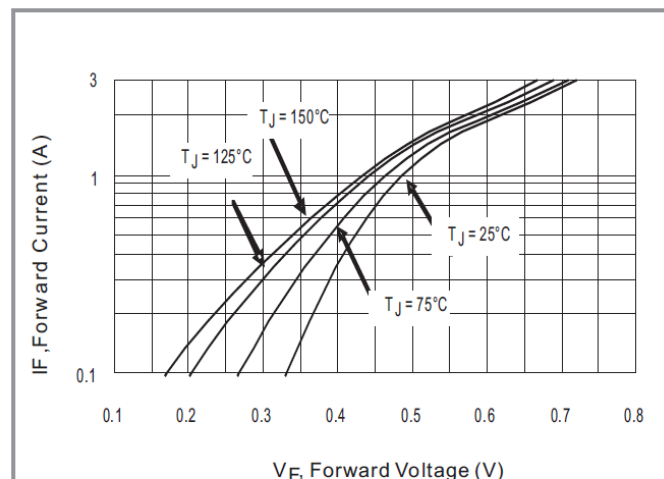
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**