

SMALL SURFACE MOUNT SCHOTTKY RECTIFIER

REVERSE VOLTAGE: 40 V
CURRENT: 0.5 A

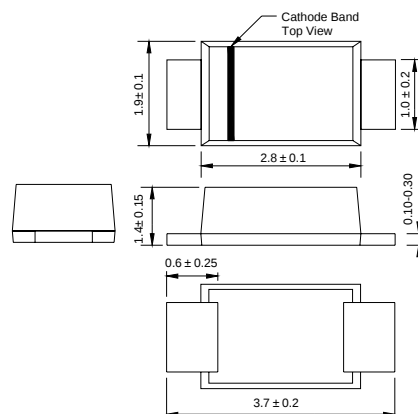
FEATURES

- Low profile package
- For surface mouted applications
- Idear for automated placement
- Low power loss,high efficiency
- High temperature soldering:
250 /10 seconds at terminals

MECHANICAL DATA

- Case:JEDEC SOD-123FL,molded plastic over passivated chip
- Terminals:Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.006 ounces, 0.02 gram
- Device marking code: B4

SOD - 123FL



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

ABSOLUTE RATINGS

Parameter	Symbol	Value	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum working peak reverse voltage	V_{RWM}	40	V
Maximum DC blocking voltage	V_R	40	V
Maximum average forward rectified current at rated V_R @ $V_C=115$	$I_{(AV)}$	0.5	A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_L=25$	I_{FSM}	5.5	A
Typical thermal resistance (NOTE 1)	R_{0JA}	206	/W
Typical thermal resistance (NOTE 2)	R_{0JL}	118	/W
Operating temperature range	T_J	-55---+150	
Storage temperature range	T_{STG}	-55---+150	

NOTES:1. Thermal resistance junction to ambient

2. Thermal resistance junction to lead

www.galaxycn.com

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ.	Max.	Unit
Maximum instantaneous forward voltage (NOTE 3)	V_F	-	-	0.51	V
@ $I_F=0.5A, T_J=25$		-	-	0.46	
$I_F=0.5A, T_J=100$		-	-	0.62	
$I_F=1.0A, T_J=25$		-	-	0.61	
Maximum DC reverse current	I_R	-	-	20	μA
@ $V_R=40V, T_J=25$		-	-	5.0	m A
at rated DC blocking voltage		-	-	10	μA
$V_R=40V, T_J=100$					
$V_R=20V, T_J=25$					

NOTES: 3.Pulse test:300 μs pulse width,1% duty cycle.

www.galaxycn.com

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

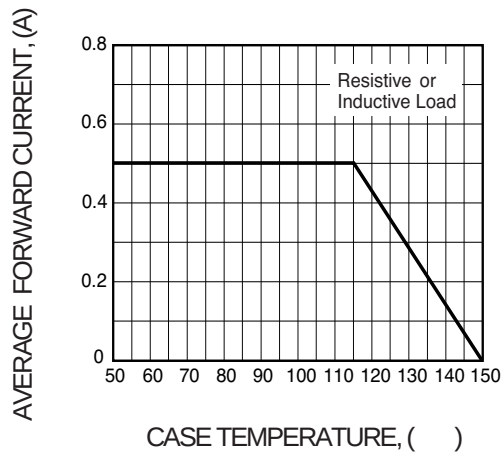


FIG. 2 - MAXIMUM NON-REPETTIVE FORWARD SURGE CURRENT

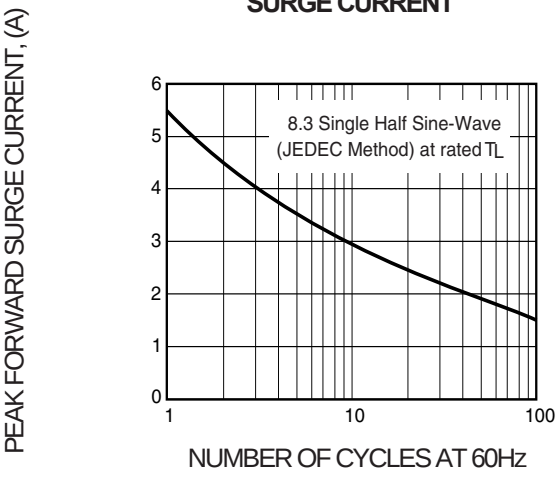


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

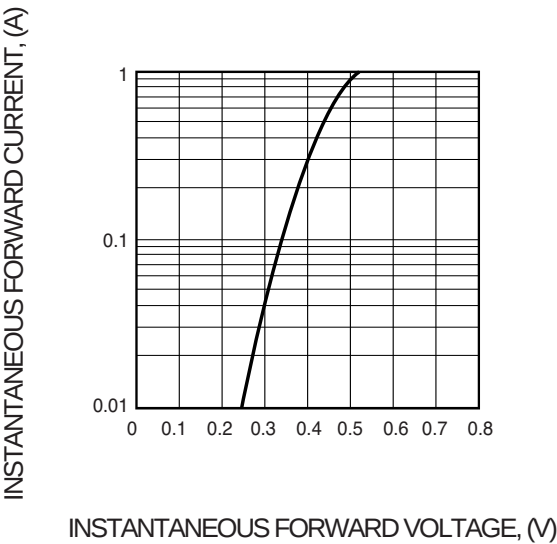


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

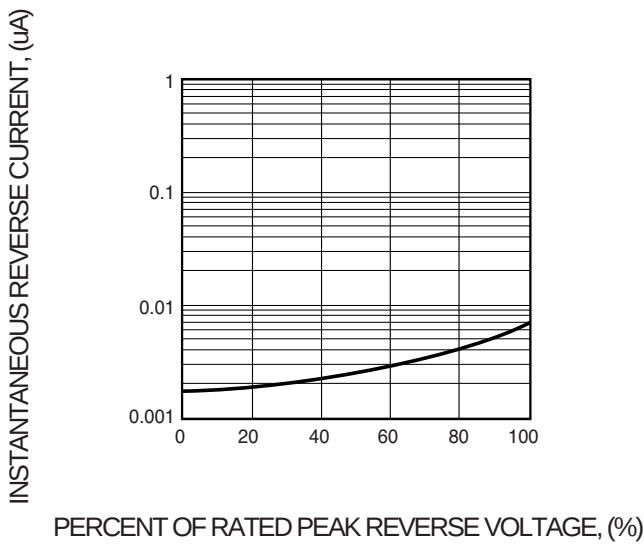


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

