BL GALAXY ELECTRICAL

S07B --- S07M

SURFACE MOUNT RECTIFIER

REVERSE VOLTAGE: 100 - 1000 V
CURRENT: 0.7 A

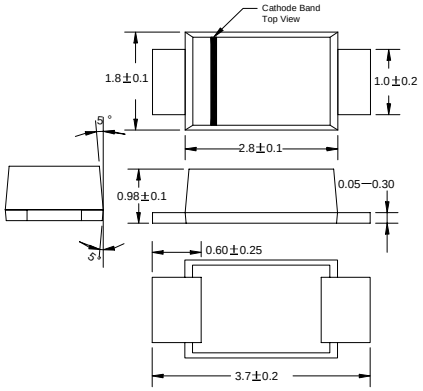
FEATURES

- ◇ Glass passivated device
- ◇ Ideal for surface mouted applications
- ◇ Low leakage current
- ◇ Metallurgically bonded construction
- ◇ 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
- ◇ Mounting position: Any

SOD - 123FL



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase,half wave,60Hz,resistive or inductive load.For capactive load,derate current by 20%.

ABSOLUTE RATINGS

		S07B	S07D	S07G	S07J	S07M	UNITS
Device marking code		B0	D0	G0	J0	M0	
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	1000	V
Maximum average forword rectified current T_A=65℃ (NOTE 1)	$I_{(AV)}$	0.7					A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load T_L=25℃	I_{FSM}	25					A
Typical thermal resistance (NOTE 2)	$R_{j\theta A}$	180					K/W
Operating temperature range	T_j	- 55 --- + 150					℃
Storage temperature range	T_{STG}	- 55 --- + 150					℃

NOTES:1.Averaged over any 20 ms period.

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2. Thermal resistance junction to ambient, 6.0 mm^2 coppeer pads to each terminal.

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ.	Max.	Unit
Maximum instantaneous (NOTE 3) forward voltage at 1.0A	V_F	-	-	1.1	V
Maximum DC reverse current @T_A=25℃	I_R	-	-	10.0	μA
at rated DC blocking voltage @T_A=125℃		-	-	50	
Typical junction capacitance (NOTE 4)	C_j	-	4	-	pF
Maximum reverse recovery time (NOTE 5)	t_{rr}	-	-	1.8	μs

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

4.Measured at 1.0MHz and applied average voltage of 4.0V DC.

5.Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

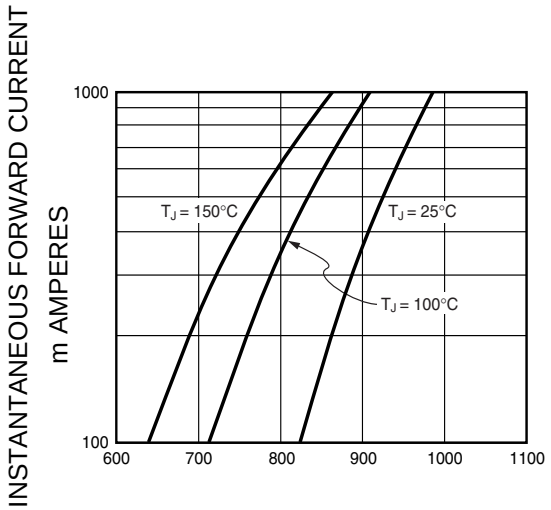

FIG.2 – TYPICAL JUNCTION CAPACITANCE

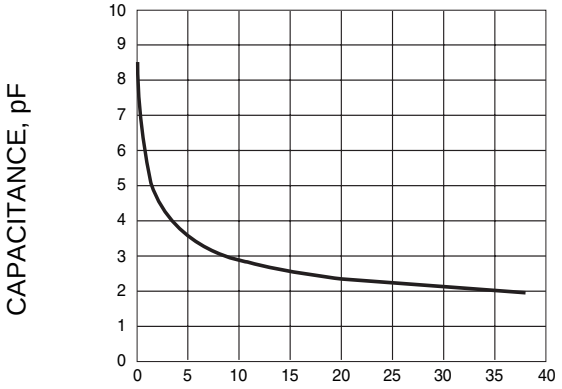

FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

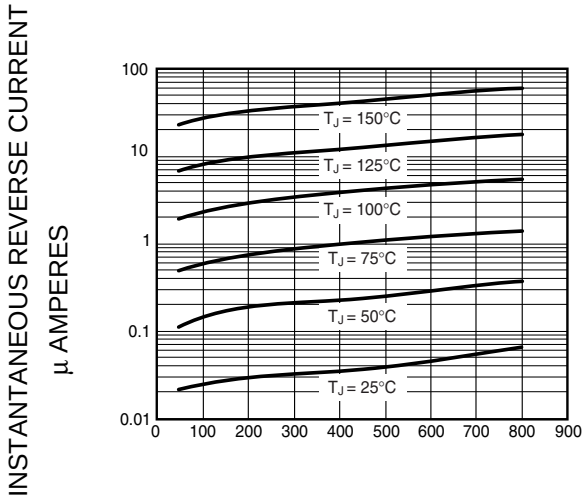

FIG.4 – FORWARD DERATING CURVE