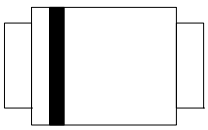
HSK07X Series

0.7 AMP. SURFACE MOUNT RECTIFIERS



SOD-123FL

Features

- Glass passivated device
- Ideal for surface mouted applications
- Low leakage current
- Metallurgically bonded construction
- High temperature soldering: 250°C/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: 0.0008 ounces, 0.022 gram1.
- Mounting position: Any

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

		HSK07B	HSK07D	HSK07G	HSK07J	HSK07K	HSK07M	UNITS
Device marking code		RB	RD	RG	RJ	RK	RM	
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forword rectified current TA=65℃ (NOTE 1)	$I_{(AV)}$	0.7						A
on rated load TL=25℃ Peak forward surge current 8.3ms single half-sine-wave superimposed	I_{FSM}	20						A
Typical thermal resistance (NOTE 2)	$R_{j\theta A}$	180						K/W
Maximum reverse recovery time (NOTE 3)	t_{rr}	150			250	500		ns
Operating temperature range	Tj	-205						℃
Storage temperature range	T_{STG}	-205						℃

Note1: Averaged over any 20 ms period.
Note2 Thermal resistance junction to ambient, 6.0 mm^2 coppeer pads to each terminal.
Note3:.Measured with IF=0.5A, IR=1A, Irr=0.25A.

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ.	Max.	Unit
forward voltage at 0.7A Maximum instantaneous (NOTE 4)	VF	-	-	1.15	V
Maximum DC reverse current @TA=25℃ at rated DC blockjing voltage @TA=125℃	IR	--	--	50 10	μA
Typical junction capacitance (NOTE 5)	Cj	-	4	-	pF

NOTES: 4.Pulse test:300μs pulse width,1% duty cycle.

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

Characteristics Curve

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

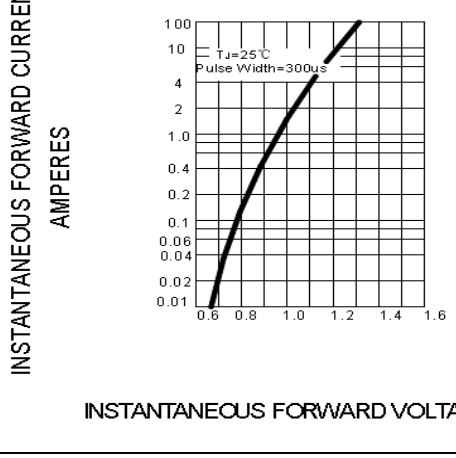


FIG.2 – TYPICAL JUNCTION CAPACITANCE

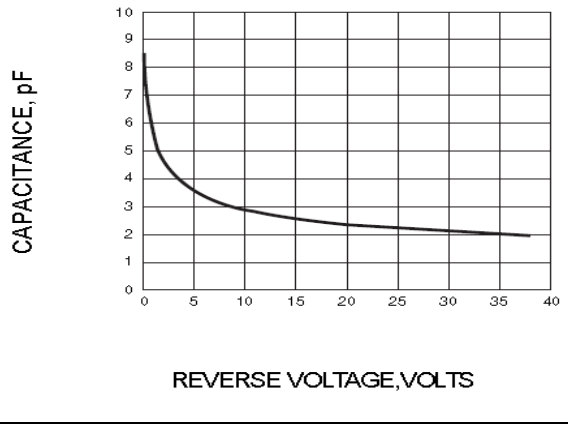


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

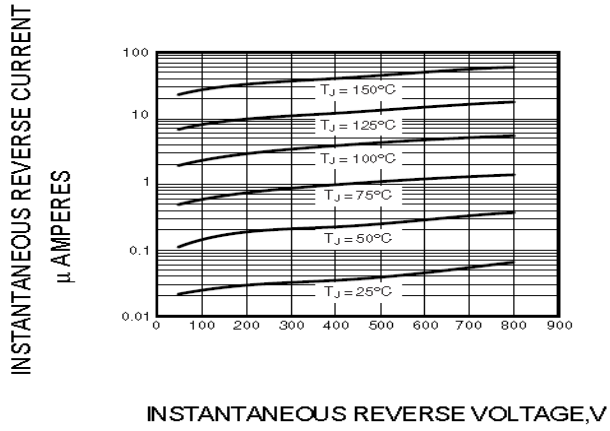
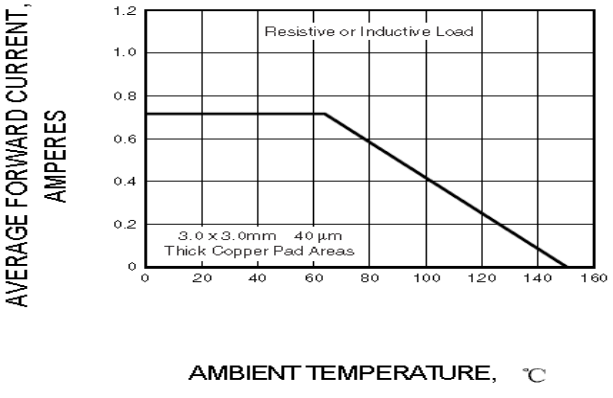
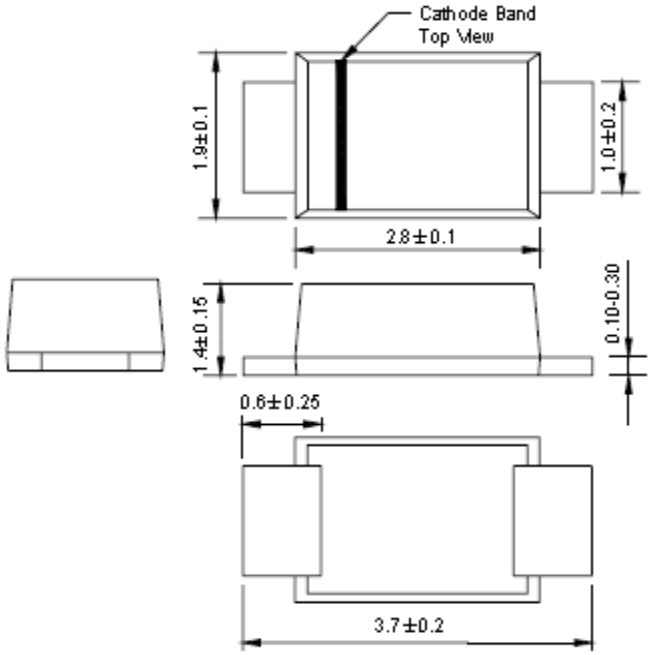


FIG.4 – FORWARD DERATING CURVE



SOD-123FL Dimension



Dimensions in millimeters

*:Typical

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