



HSK400X Series

1.0AMP. SURFACE MOUNT RECTIFIERS

Features

- Low forward surge current
- Ideal for surface mouted applications
- Low leakage current

Mechanical Data

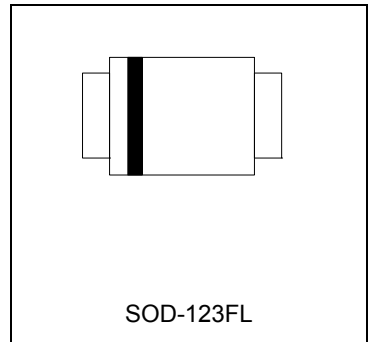
- Case: JEDEC SOD-123FL, molded plastic over passivated chip.
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.006 ounces, 0.02 gram .
- Mounting position: Any.

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%.

		HSK 4001	HSK 4002	HSK 4003	HSK 4004	HSK 4005	HSK 4006	HSK 4007	UNITS
Device marking code		D1	D2	D3	D4	D5	D6	D7	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @ $T_A=75^{\circ}C$	$I_{(AV)}$	1							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	25							A
Maximum DC reverse current @ $T_A=25^{\circ}C$ at rated DC blocking voltage @ $T_A=125^{\circ}C$	I_R	5.0							μA
		50.0							
measured at $f=1MHz, V_R=4.0V$ Typical junction capacitance	C_J	15							p F
Typical thermal resistance junction to lead	$R_{\theta JL}$	20							$^{\circ}C/W$
Operating temperature range	T_j	- 55 --- + 150							$^{\circ}C$
Storage temperature range	T_{STG}	- 55 --- + 150							$^{\circ}C$

Note1: Pulse test: pulse width 300 μ sec, duty cycle 2%.





Characteristics Curve

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

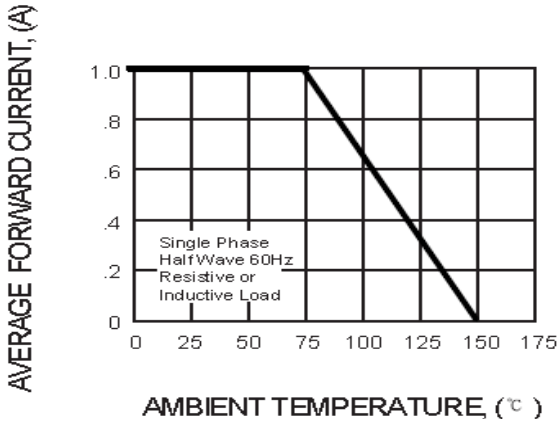


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

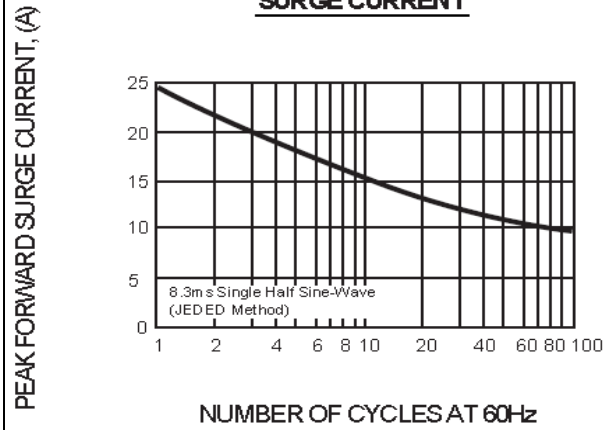


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

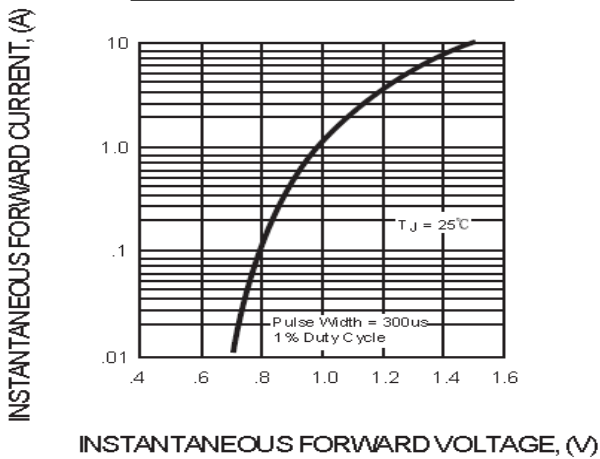


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

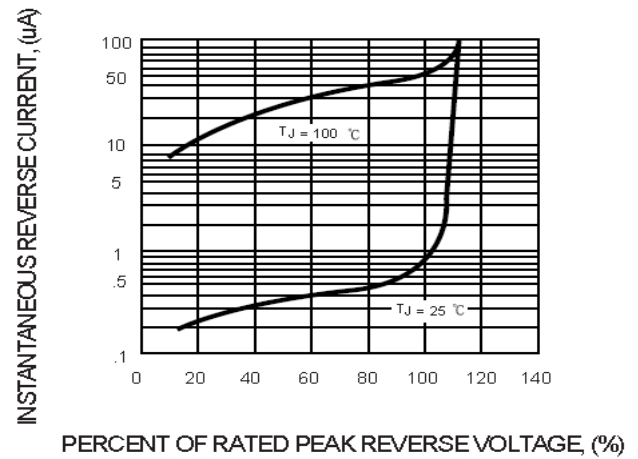
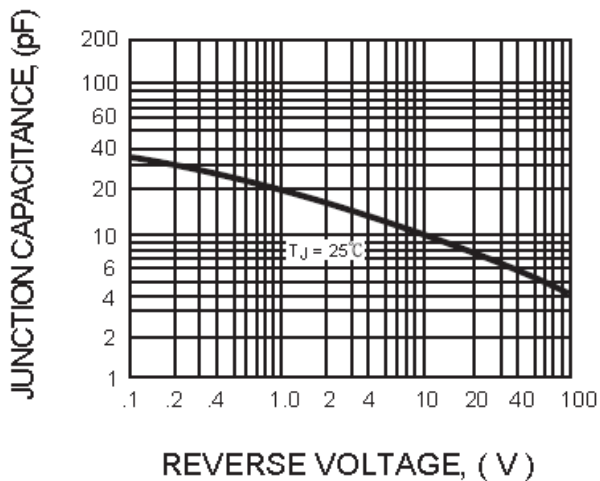
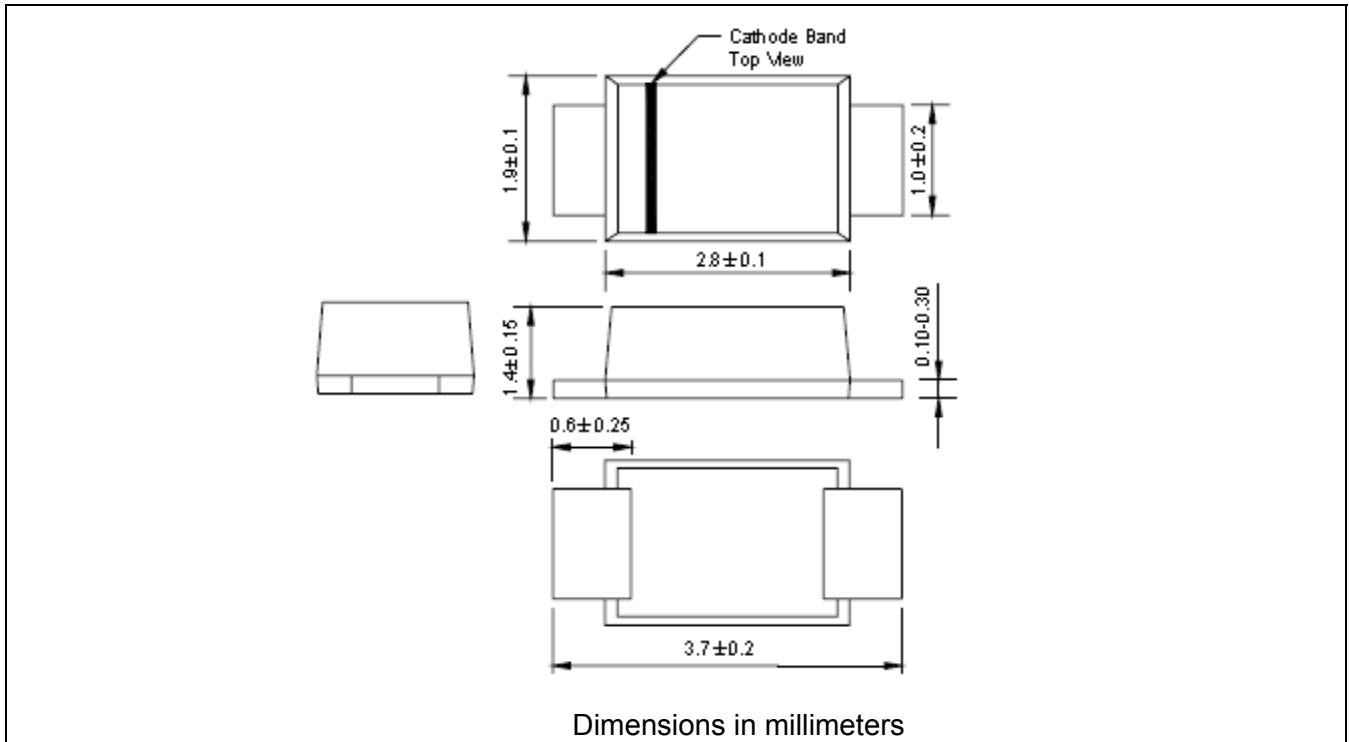


FIG. 5 - TYPICAL JUNCTION CAPACITANCE





SOD-123FL Dimension



*:Typical

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