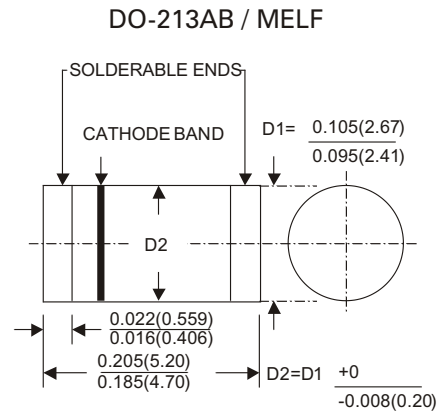


HSM101 thru HSM107

SURFACE MOUNT GLASS PASSIVATED HIGH EFFICIENCY SILICON RECTIFIER



Dimension in inches (millimeters)

FEATURES

- Ideal for surface mounted applications
- Easy pick and place
- Low leakage current
- Glass passivated chips
- Fast switching
- Metallurgically bonded construction
- High temperature soldering guaranteed :
250°C/10 seconds/.375" , (9.5mm) lead lengths

MECHANICAL DATA

Case : Molded plastic use UL94V-0 recognized flame retardant epoxy
 Terminals : Plated terminals, solderable per MIL-STD-202, Method208
 Polarity : Red Color band on body denotes cathode
 Mounting position : Any
 Weight : 0.12gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temp. unless otherwise specified
 Single phase, half sine wave, 60Hz, resistive or inductive load

	SYMBOL	HSM 101	HSM 102	HSM 103	HSM 104	HSM 105	HSM 106	HSM 107	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375" , (9.5mm) lead length @ $T_T=55^\circ C$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current ,8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0		1.3		1.7			Volts
Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	I_R	5.0 100							μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50				75			nS
Typical Junction Capacitance (Note 2)	C_J	20				15			pF
Typical Junction Capacitance	$R_{\theta JA}$ $R_{\theta JC}$	60 18							$^\circ C / W$
Operating Temperature Range T_J	T_J	-65 to +125							$^\circ C$
Storage Temperature Range T_{STG}	T_{STG}	-65 to +150							$^\circ C$

NOTES :

1. Reverse Recovery Test Conditions : $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C

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RATING AND CHARACTERISTICS CURVES HSM101 THRU HSM107

