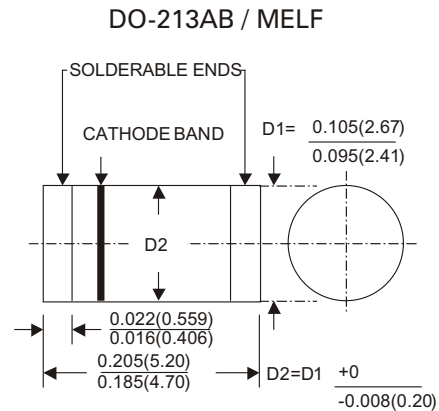


SM201 thru SM207

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS



Dimension in inches (millimeters)

FEATURES

- Ideal for surface mounted applications
- Easy pick and place
- Low leakage current
- Glass passivated chips
- 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, Method 208
 Polarity : Red Color band on body denotes cathode
 Mounting position : Any
 Weight : 0.12grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SM201	SM202	SM203	SM204	SM205	SM206	SM207	UNITS
Maximum Current 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 @ $T_T=60^\circ C$	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	55							Amps
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.1							Volts
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R	5.0 100							μA
Maximum Full Load Reverse Current, Full Cycle Average 0.375" (9.5mm) lead length @ $T_A=75^\circ C$	$I_{R(AV)}$	30							μA
Typical Junction Capacitance (Note 1)	C_J	30.0							pF
Typical Thermal Resistance $R_{\theta JA}$ (Note 2)	$R_{\theta JA}$	50							$^\circ C / W$
Operating Temperature T_J	T_J	-65 to +150							$^\circ C$
Storage Temperature Range T_{STG}	T_{STG}	-65 to +150							$^\circ C$

NOTES :

1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C
2. Thermal Resistance From Junction to Ambient 0.375" (9.5mm) lead length

SM201 thru SM207

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

RATINGS AND CHARACTERISTIC CURVES SM201 THRU SM207

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

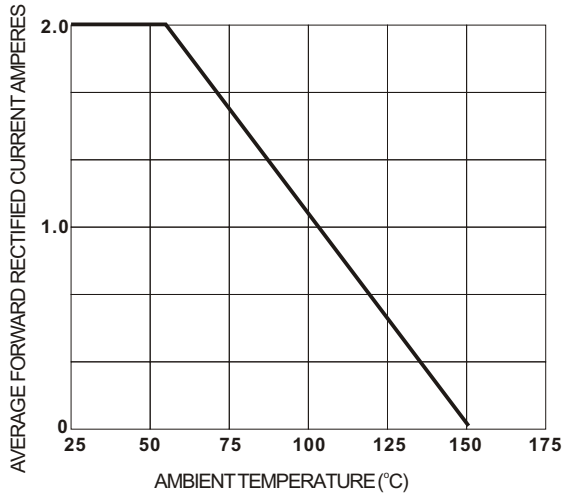


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

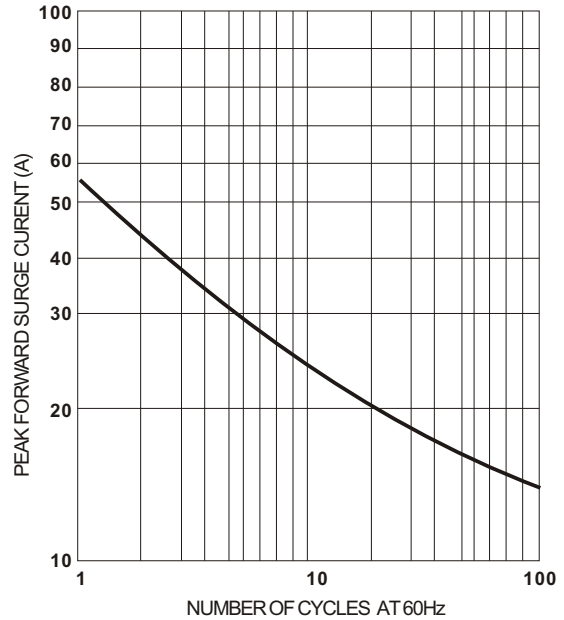


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

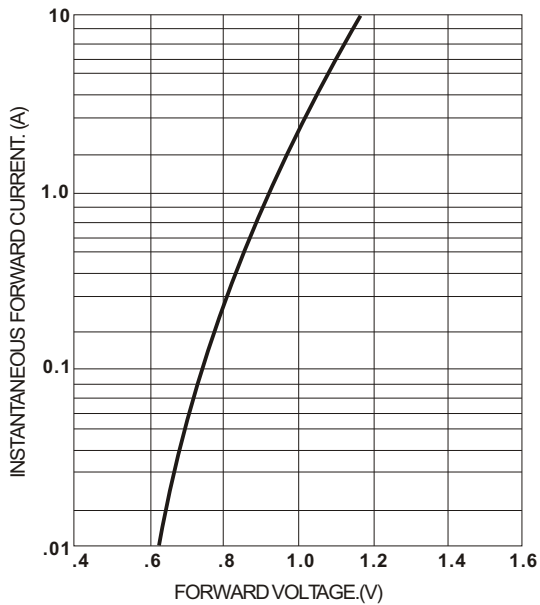


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

