



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**SM5391
THRU
SM5399**

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SILICON RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 1.5 Amperes*

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Glass passivated junction

MECHANICAL DATA

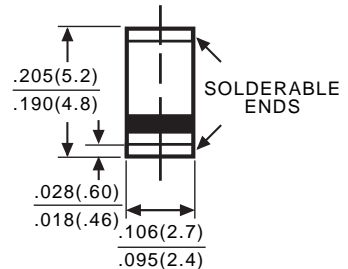
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.12 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



SM-1(DO-213AB)



Dimensions in inches and (millimeters)

	SYMBOL	SM5391	SM5392	SM5393	SM5395	SM5397	SM5398	SM5399	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 T _A = 75°C	I _O	1.5							Amps	
Peak Forward Surge Current I _{FM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							Amps	
Maximum Forward Voltage at 1.5A DC	V _F	1.4							Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@ T _A = 25°C	5.0							μAmps
		@ T _A = 125°C	100							
Typical Thermal Resistance (Note 2)	R _{θJC}	60							°C/W	
Typical Junction Capacitance (Note 1)	C _J	30							pF	
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150							°C	

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC
2. Thermal resistance (Junction to Ambient),.24in² (6.0mm²) copper pads to each terminal.

RATING AND CHARACTERISTIC CURVES (SM5391 THRU SM5399)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

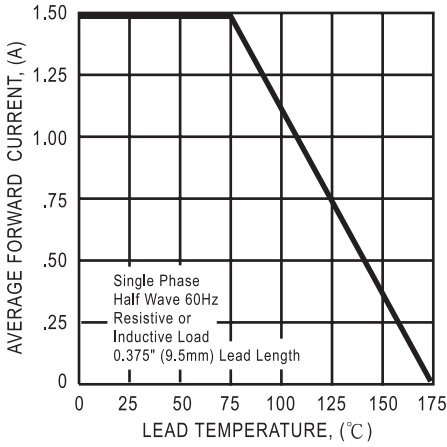


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

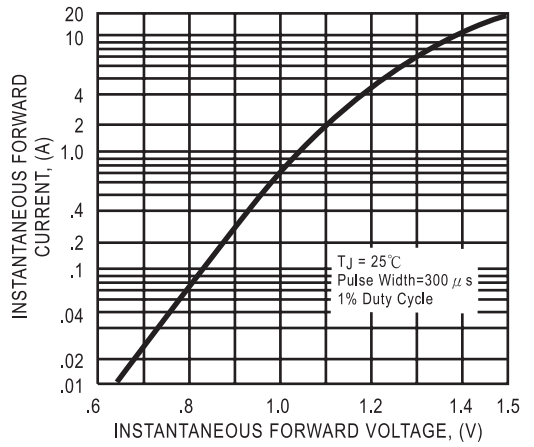


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

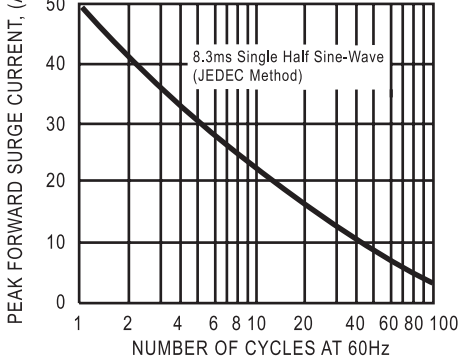


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

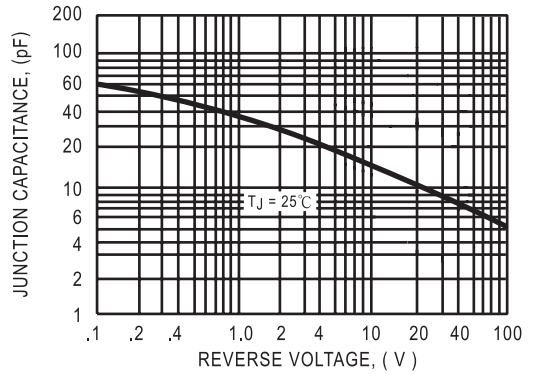


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

