



SM5391-SM5399

Rectifier Specialists

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 1.5 Amperes



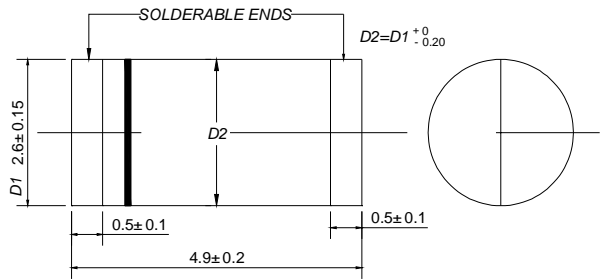
DO-213AB

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



Dimensions in millimeters

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%.

	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				5.0				μAmps
					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

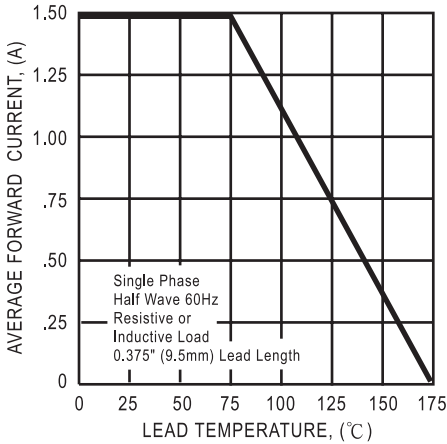


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

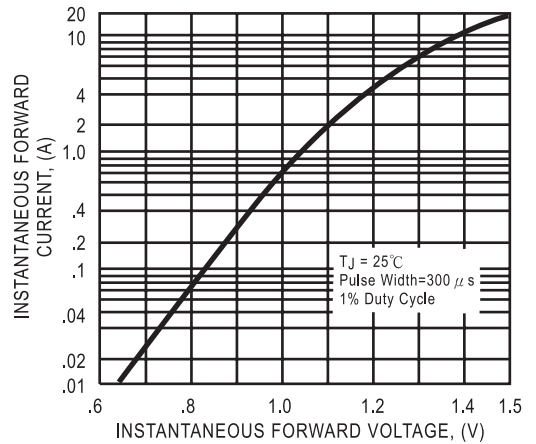


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

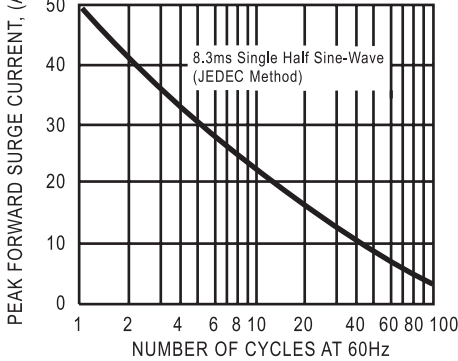


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

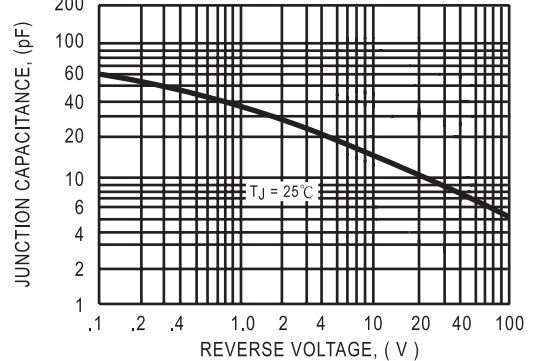


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

