DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SS32F THRU SS320F

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 200 Volts *CURRENT - 3.0 Amperes*

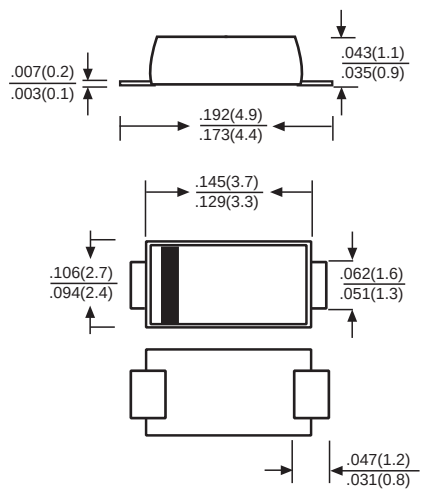
FEATURES

* Ideal for surface mounted applications
* Glass passivated junction
* Low leakage current
* Low power loss
* High efficiency

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Terminals: Solder plated solderable per MIL-STD-750, Method 2026
* Polarity: As marked
* Mounting position: Any
* Weight: 0.03 gram

SMAFL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		SYMBOL	SS32F	SS34F	SS36F	SS38F	SS310F	SS312F	SS315F	SS320F	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	20	40	60	80	100	120	150	200	Volts
Maximum RMS Voltage		V_{RMS}	14	28	42	56	70	84	105	140	Volts
Maximum DC Blocking Voltage		V_{DC}	20	40	60	80	100	120	150	200	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature at T_A = 75 °C		I_O	3.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	70								Amps
Maximum Instantaneous Forward Voltage at 3.0A DC		V_F	0.55		0.70		0.85		0.95		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	2.0								mAmps
	@T_A = 100°C		10								
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	55								°C/W
Typical Junction Capacitance (Note 2)		C_J	450								pF
Operating Temperature Range		T_J	-55 to +125								°C
Storage Temperature Range		T_{STG}	-55 to +150								°C

NOTES : 1. Thermal Resistance (Junction to Ambient)

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

3. P.C.B. mounted with 0.5x0.5"(12.7x12.7mm^2) copper pad area.

RATING AND CHARACTERISTIC CURVES (SS32F THRU SS320F)

FIG.1
TYPICAL FORWARD CURRENT DERATING CURVE

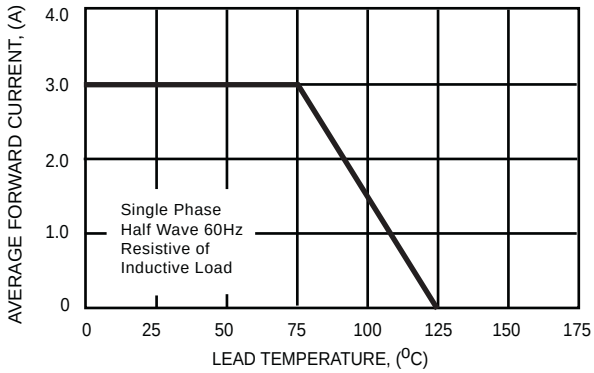


FIG.2
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

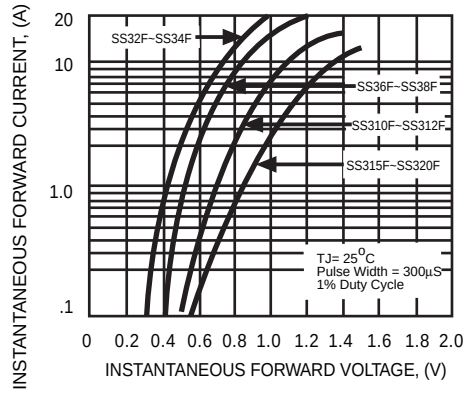


FIG.3
TYPICAL REVERSE CHARACTERISTICS

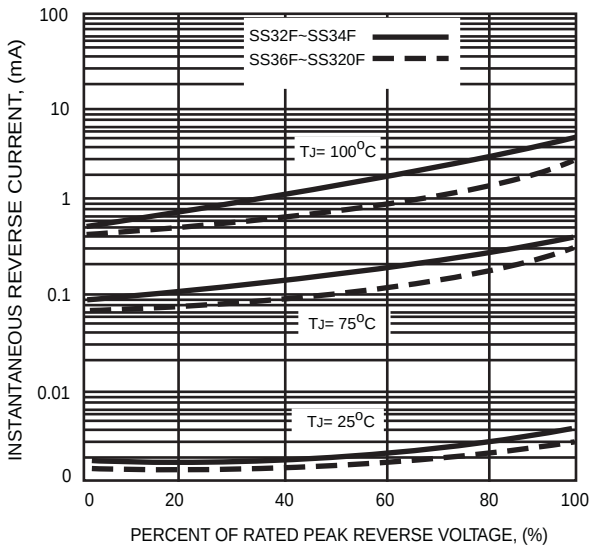


FIG.4
TYPICAL TRANSIENT THERMAL IMPEDANCE

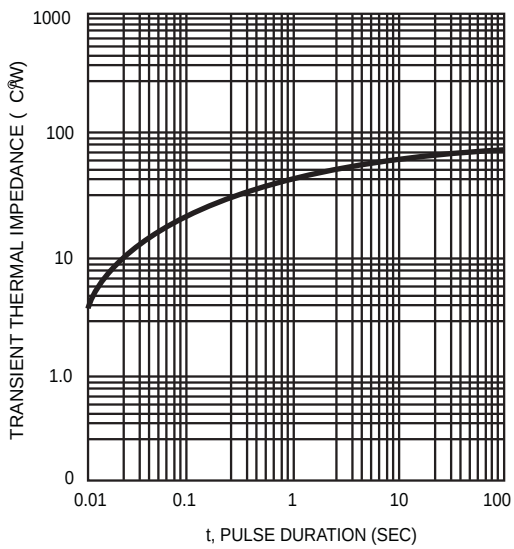


FIG.5
TYPICAL JUNCTION CAPACITANCE

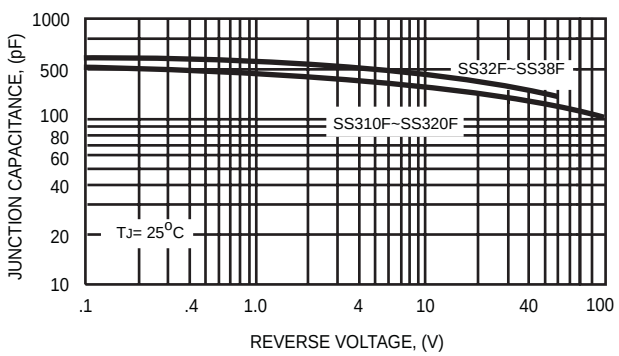
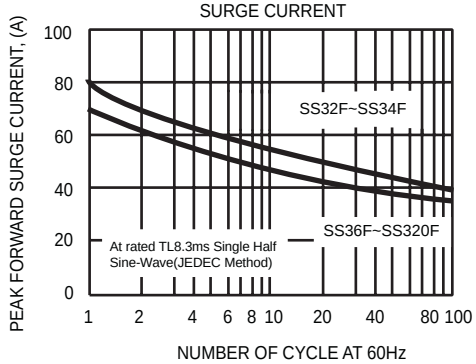


FIG.6
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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