

SSF1A THRU SSF1M

**ULTRA FAST
PLASTIC SILICON RECTIFIER**
VOLTAGE:50 TO 1000V CURRENT: 1.0A



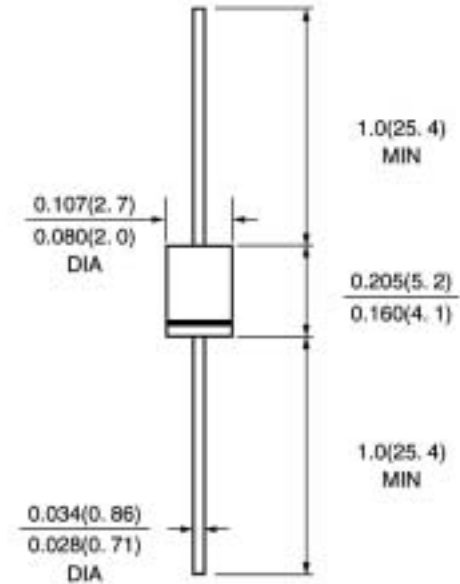
FEATURE

Low power loss
High surge capability
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250°C/10sec/0.375"lead length at 5 lbs tension

MECHANICAL DATA

Terminal:Plated axial leads solderable per MIL-STD 202E, method 208C
Case:Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity:color band denotes cathode
Mounting position:any

DO -41\DO-204AL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SSF 1A	SSF 1B	SSF 1D	SSF 1G	SSF 1J	SSF 1K	SSF 1M	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{rms}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =75°C	I _{f(av)}	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30.0							A
Maximum Forward Voltage at Forward current 1A Peak	V _f	0.95		1.25		1.3		V	
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I _r	10.0 100.0							μA μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35		40		50		nS	
Typical Junction Capacitance (Note 2)	C _j	30				25			pF
Typical Thermal Resistance (Note 3)	R(ja)	40							°C/W
Storage and Operating Junction Temperature	T _{stg,Tj}	-55 to +150							°C

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES SSF1A THRU SSF1M

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FIG.1 - FORWARD CURRENT DERATING CURVE

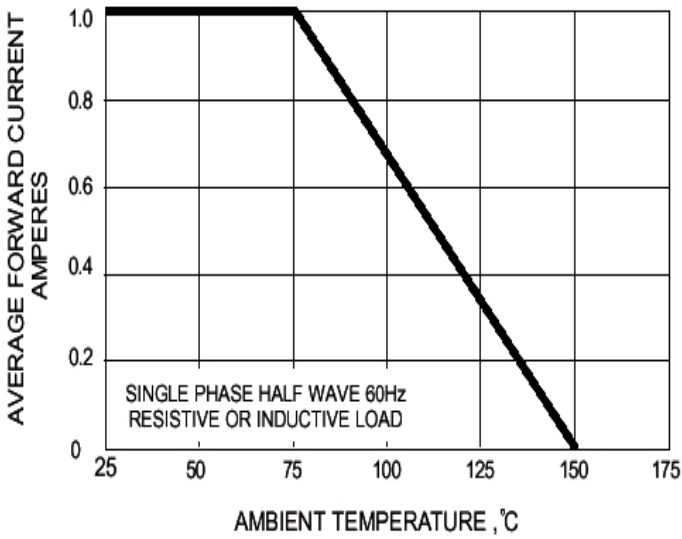


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

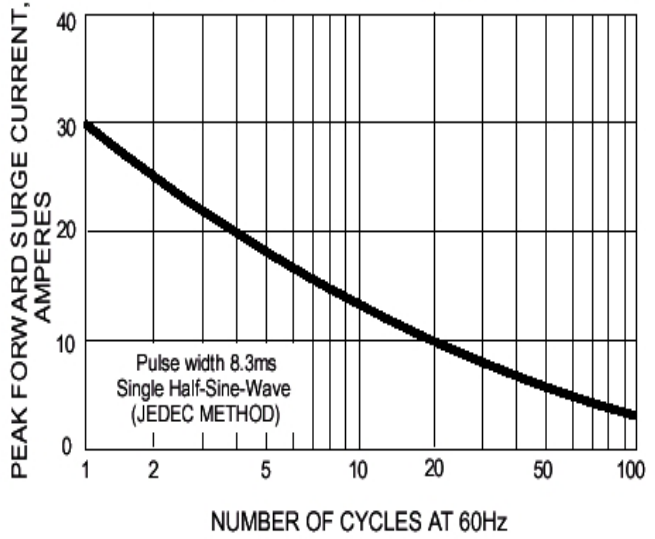


FIG.3 - TYPICAL JUNCTION CAPACITANCE

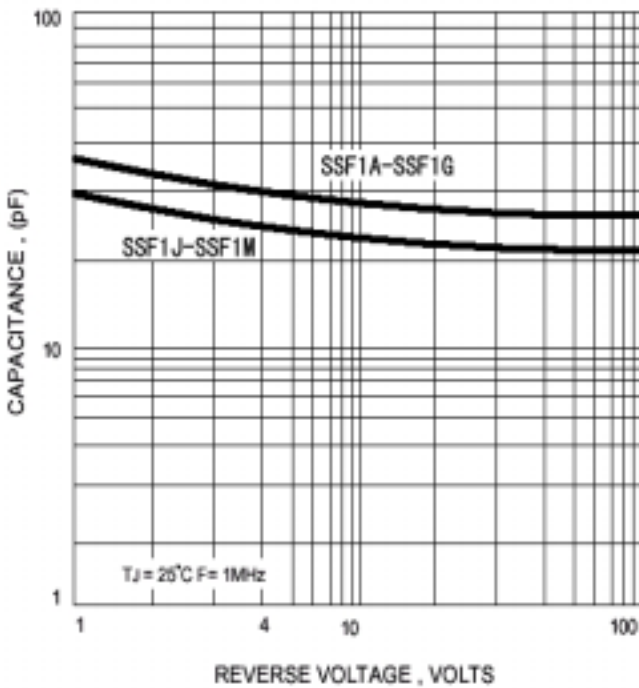


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

