SSF3A THRU SSF3M

ULTRA FAST
PLASTIC SILICON RECTIFIER

VOLTAGE:50 TO 1000V CURRENT: 3.0A

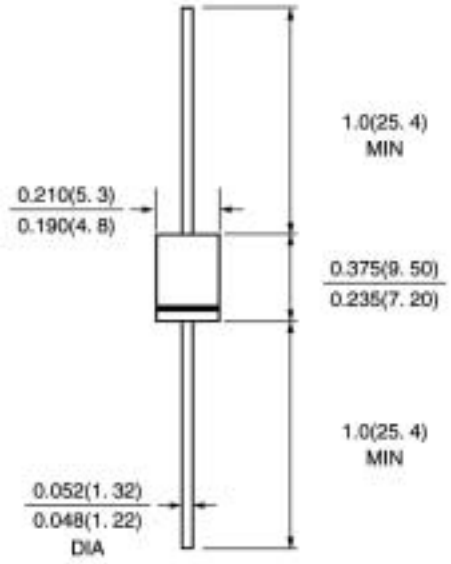
FEATURE

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-201AD



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 3A	SSF 3B	SSF 3D	SSF 3G	SSF 3J	SSF 3K	SSF 3M	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =55°C	If(av)	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	125.0							A
Maximum Forward Voltage at Forward current 3A Peak	Vf	0.95			1.25	1.3			V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	Ir	10.0 100.0							μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	35			40	50			nS
Typical Junction Capacitance (Note 2)	Cj	70				45			pF
Typical Thermal Resistance (Note 3)	R(ja)	20.0							°C/W
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150							°C

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8”lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES SSF3A THRU SSF3M

[1]

FIG.1 - FORWARD CURRENT DERATING CURVE

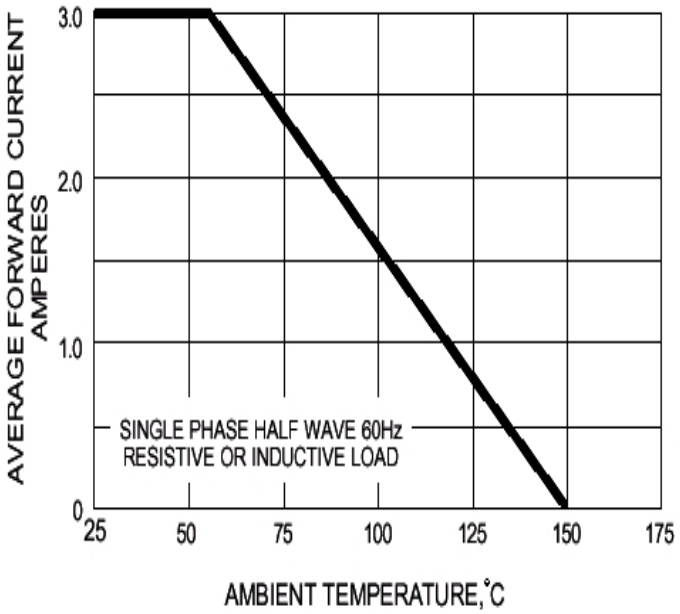


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

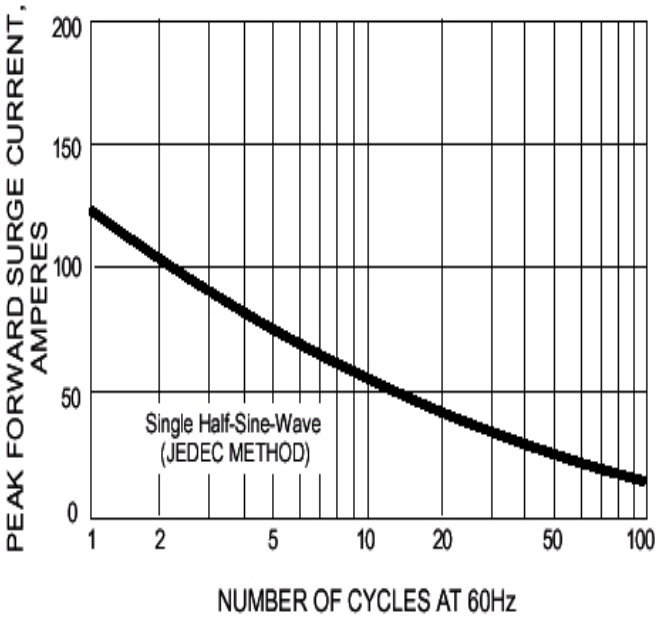


FIG.3 - TYPICAL JUNCTION CAPACITANCE

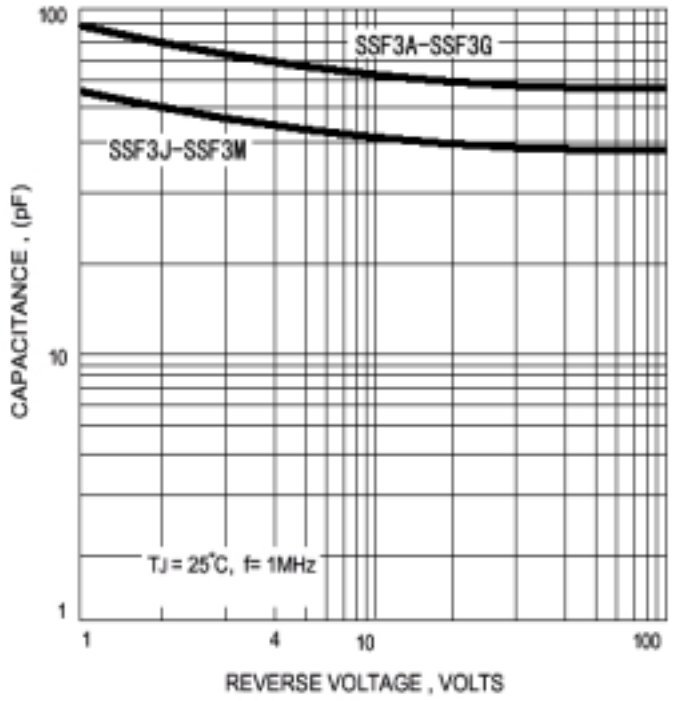
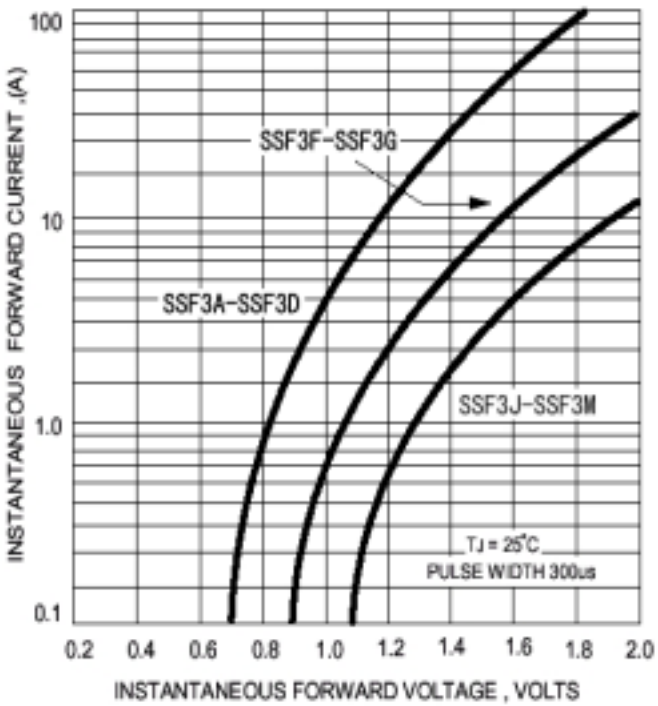


FIG.4 - TYPICAL FORWARD CHARACTERISTICS



[1] Rev.A4, 1-Jul-03