

# SUF5400 THRU SUF5408

**HIGH EFFICIENT  
PLASTIC SILICON RECTIFIER**  
VOLTAGE:50 TO 1000V      CURRENT: 3.0A

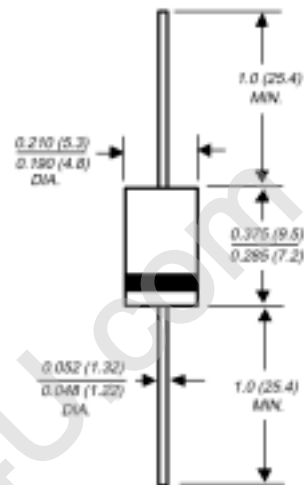
## FEATURE

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	SUF 5400	SUF 5401	SUF 5402	SUF 5404	SUF 5406	SUF 5407	SUF 5408	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	150.0							A
Maximum Forward Voltage at Forward current 1A Peak	Vf	1.0			1.4	1.7			V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10.0 100.0							μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	50			75				nS
Typical Junction Capacitance (Note 2)	Cj	70			50				pF
Typical Thermal Resistance (Note 3)	R(ja)	15.0							°C/W
Storage and Operating Junction Temperature	Tstg,Tj	-65 to +150							°C

Note:

- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0V<sub>dc</sub>
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

# RATINGS AND CHARACTERISTIC CURVES SUF5400 THRU SUF5408

FIG. 1 - TYPICAL REVERSE CHARACTERISTICS

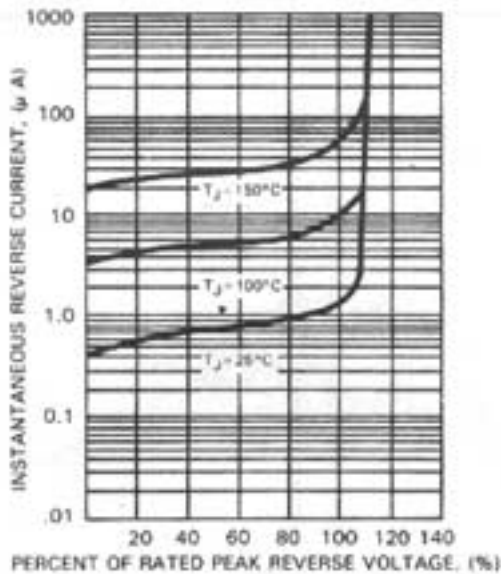


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

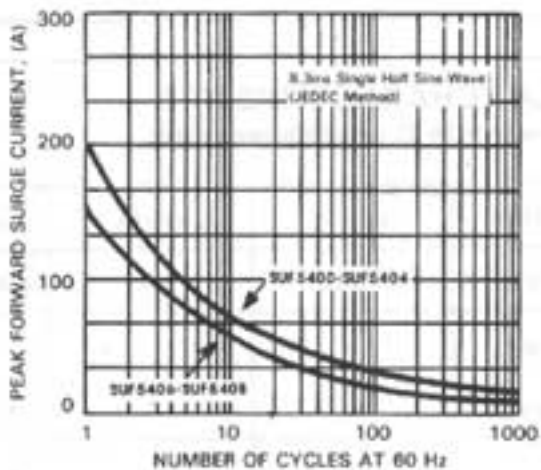


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

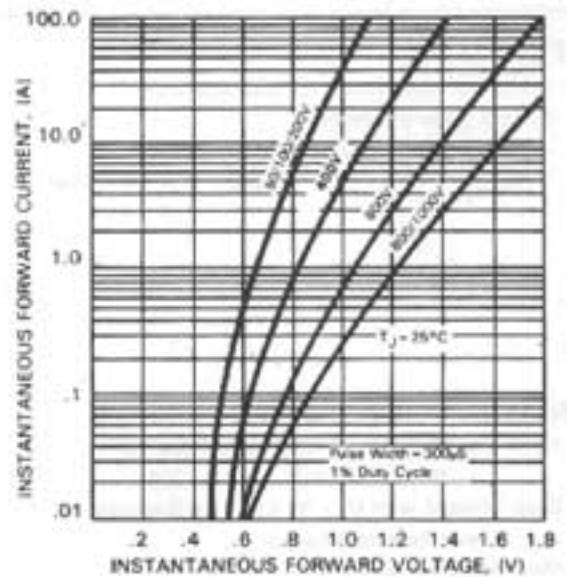


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

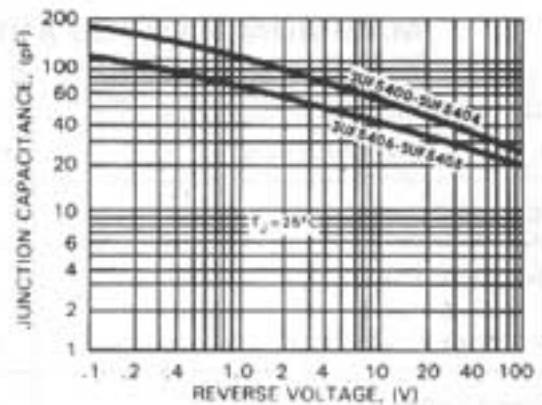


FIG. 5 - TYPICAL FORWARD CURRENT DERATING CURVE

