

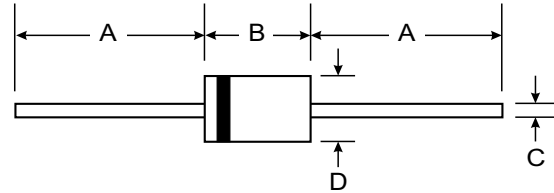
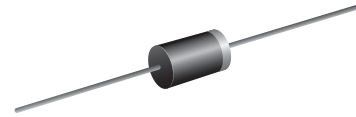
VOLTAGE RANGE: 400 - 600V
CURRENT: 3.0 A

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Super fast recovery time

Mechanical Data

- Case : DO-201AD Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 1.21 grams



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SUF30G	SUF30J	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	400	600	Volts
Maximum RMS voltage	V _{RMS}	280	420	Volts
Maximum DC blocking voltage	V _{DC}	400	600	Volts
Maximum average forward rectified current, 0.200" (5.0mm) lead length at T _A =60°C	I _(AV)	3.0		Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _A =60°C	I _{FSM}	80.0		Amps
Maximum instantaneous forward voltage at 3.0A	V _F	1.80	2.0	Volts
Maximum peak reverse current T _A =25°C at rated peak reverse voltage T _A =100°C	I _R	10.0 100.0		μA
Maximum reverse recovery time (NOTE1)	t _{rr}	35.0		ns
Typical junction capacitance (NOTE 2)	C _J	60		pF
Typical thermal resistance (NOTE 3)	R _{θJA}	25.0		°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150		°C

NOTES:

(1) Reverse recovery test condition: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient at 0.200" (5.0mm) lead length with both leads attached to heat sink



RATINGS AND CHARACTERISTIC CURVES SUF30G AND SUF30J

FIG. 1 - FORWARD CURRENT DERATING CURVE

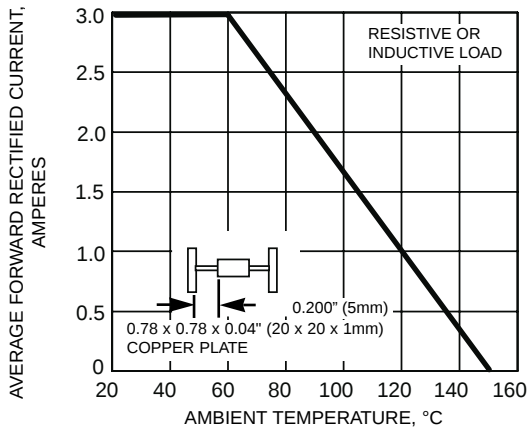


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

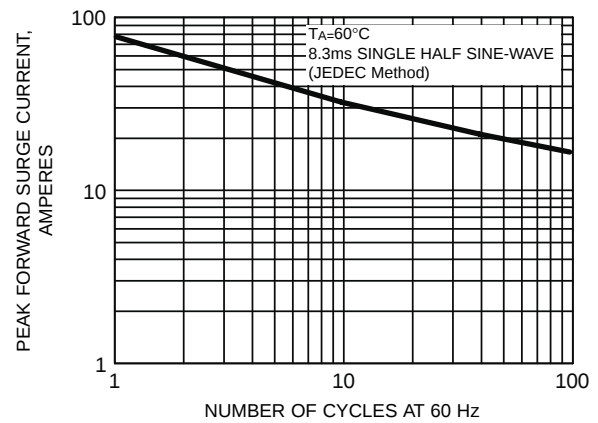


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

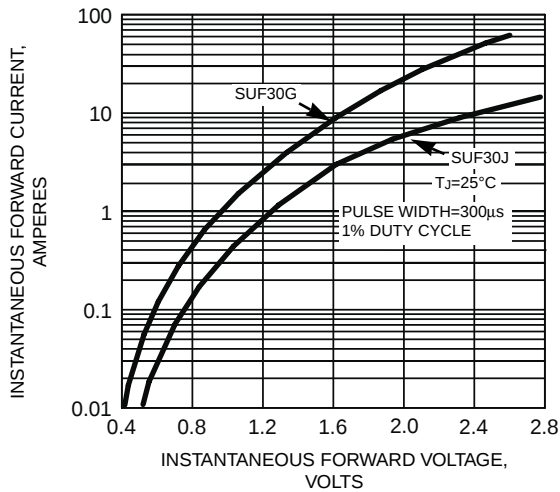


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

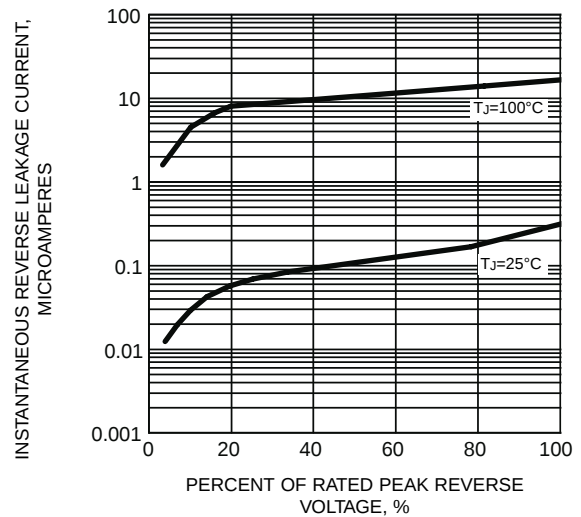


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

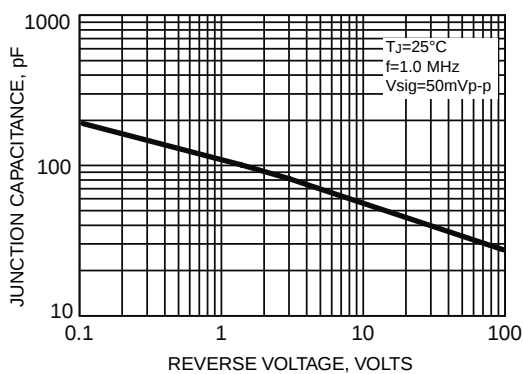


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

