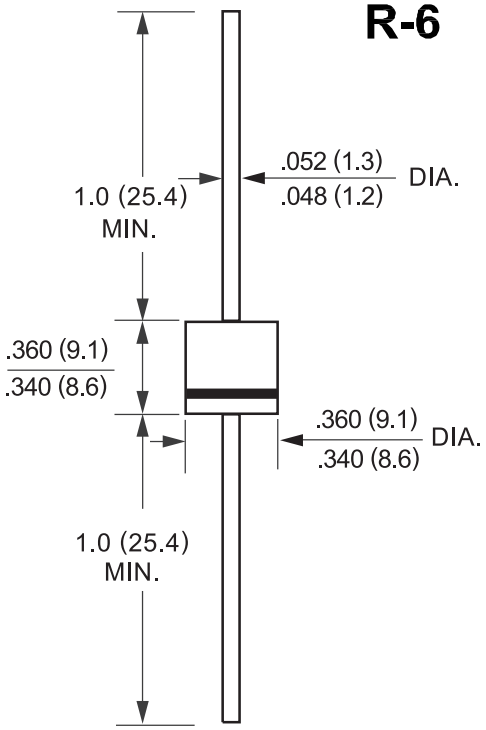
CURRENT 6.0 Ampere
VOLTAGE RANG 50 to 600 Volts

SF61 THRU SF68

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Super fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension

R-6



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: R-6 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.072 ounce, 2.05 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Catalog Number	SYMBOLS	SF61	SF62	SF63	SF64	SF65	SF66	SF68	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	VOLTS
Maximum average forward rectified current 0.375”(9.5mm) lead length at T_A=55°C	$I_{(AV)}$	6.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 6.0A	V_F	0.95				1.25		1.7	Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=100°C	I_R	10.0 50.0							μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	35							ns
Typical junction capacitance (NOTE 2)	C_J	100.0				50.0			pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	30.0							°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-50 to +150							°C

Note:1.Reverse recovery condition I_F=0.5A,I_R=1.0A,Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.Thermal resistance from junction to ambient at 0.375”(9.5mm)lead length,P.C.B. mounted

CURRENT 6.0 Ampere
VOLTAGE RANG 50 to 600 Volts

SF61 THRU SF68

RATING AND CHRACTERISTIC CURVES SF61 Thru SF68

FIG. 1- FORWARD CURRENT DERATING CURVE

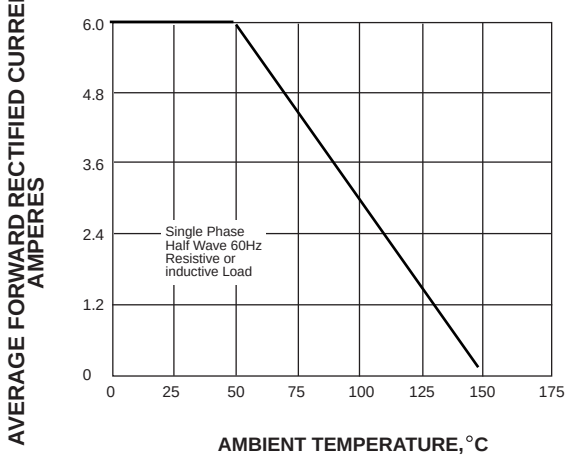


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

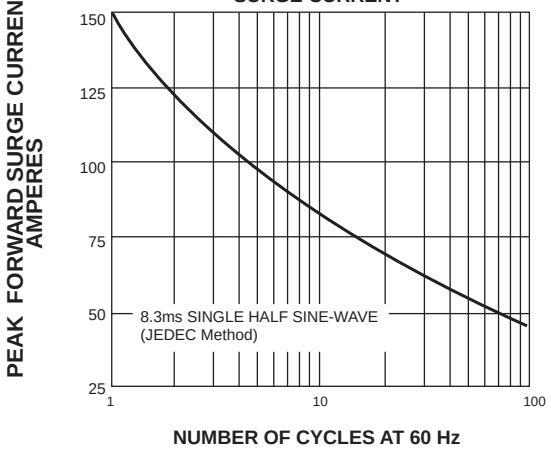


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

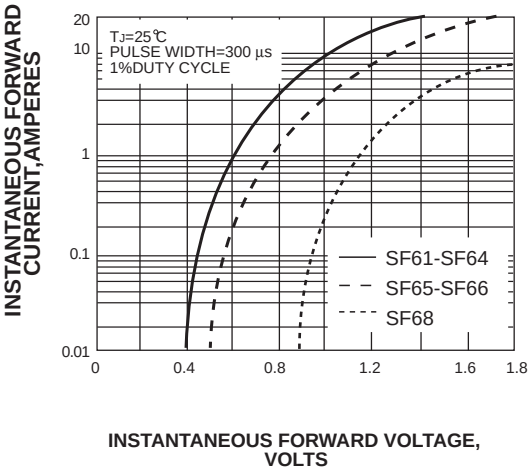


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

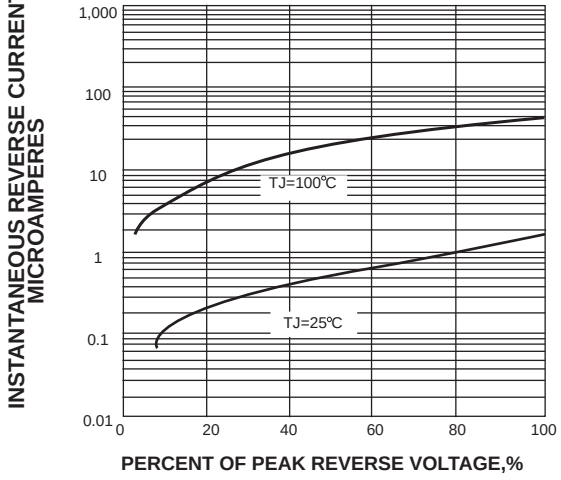


FIG. 5-TYPICAL JUNCTION CAPACITANCE

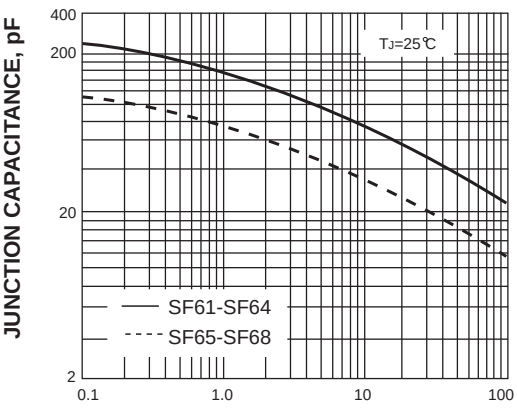


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

