

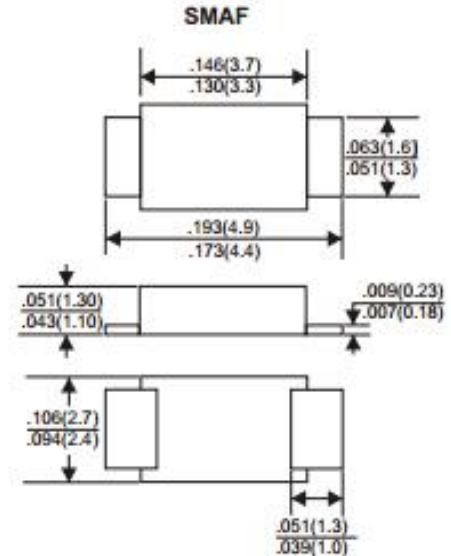
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.0 Ampere

FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Fast switching speed

MECHANICAL DATA

- Case: SMA mold plastic
- Epoxy: UL94V-0 rate flame retardant
- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Mounting position: Any



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 derate current by 20%

	SYMBOLS	US1AF	US1BF	US1DF	US1GF	US1JF	US1KF	US1MF	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_A=55^\circ\text{C}$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0			1.3	1.7			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A = 25^\circ\text{C}$							μA
		$T_A = 100^\circ\text{C}$							
Maximum Reverse Recovery Time(NOTE1)	T_{RR}	50				75			
Typical Junction Capacitance (NOTE 2)	C_J	20							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Notes:

- 1.Reverse Recovery Test Conditions: $I_f=0.5\text{A}, I_r=1.0\text{A}, I_{rr}=0.25\text{A}$.
- 2.Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
- 3.Thermal Resistance from Junction to Ambient at $8.0 \times 8.0\text{mm}^2$ copper pad areas.

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

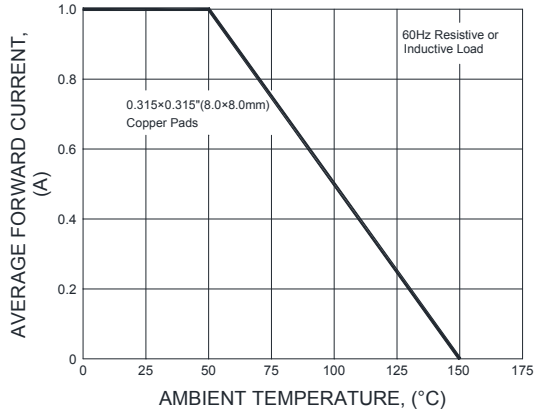


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

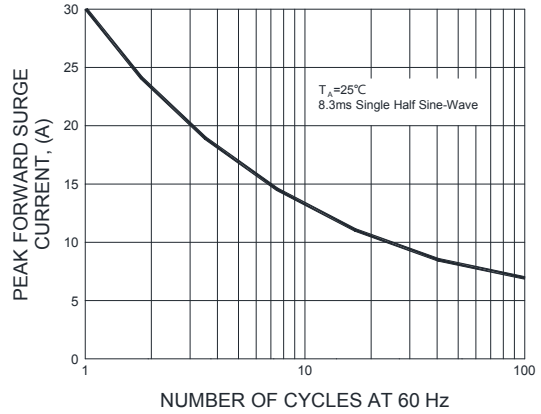


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

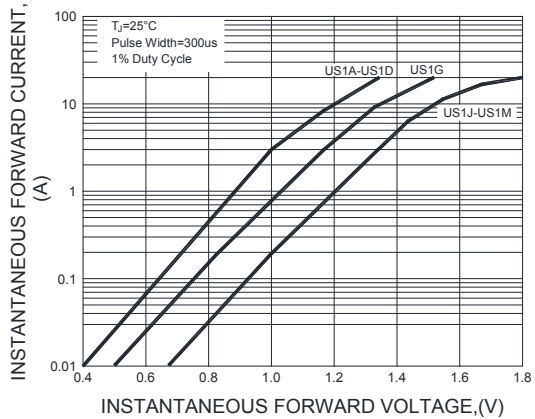
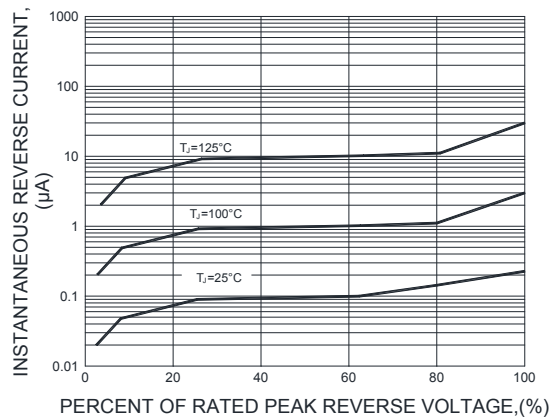


FIG.4-TYPICAL REVERSE CHARACTERISTICS



F1G.6-TEST CIRCUIT DIAGRAM AND FORWARD SURGE CURRENT

