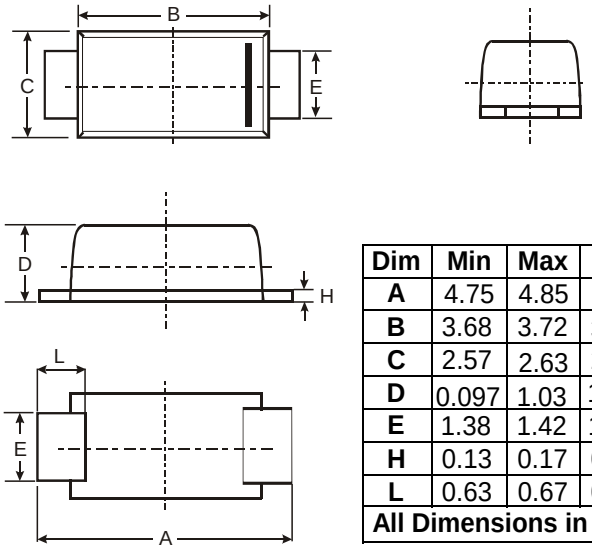
CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

US3AAF THRU US3MAF

FEATURES

- Plastic package has underwrites laboratory flammability Classification 94V-0
- Glass passivated chip junction
- Built-in strain relief,
- Fast switching speed for high efficiency
- High temperature soldering guaranteed: 250 /10 seconds

S M A F



Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			

MECHANICAL DATA

Case: JEDED SMAF transfer molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0018 ounce, 0.062 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	US3A	US3B	US3D	US3G	US3J	US3K	US3M	UNIT
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_L=105 (NOTE 1)	$I_{(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							Amps
Maximum Instantaneous Forward Voltage at 3.0A	V_F	1.0			1.3	1.7			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage at T_A = 25	I_R	10							UA
Maximum DC Reverse Current at rated DC Blocking Voltage at T_A = 125	I_R	200							UA
Maximum Reverse Recovery Time Test conditions I_F =0.5A, I_R =1.0A, I_{RR} =0.25A	t_{rr}	50				100			nS
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	80				50			pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	55							/W
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$	17							/W
Operating Junction Temperature	T_J	(-55 to +150)							
Storage Temperature Range	T_{STG}	(-55 to +150)							

Notes:
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.3×0.3″ (8.0 × 8.0mm) copper pad areas.

CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

US3AAF THRU US3MAF

RATING AND CHRACTERISTIC CURVES US3A Thru US3M

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

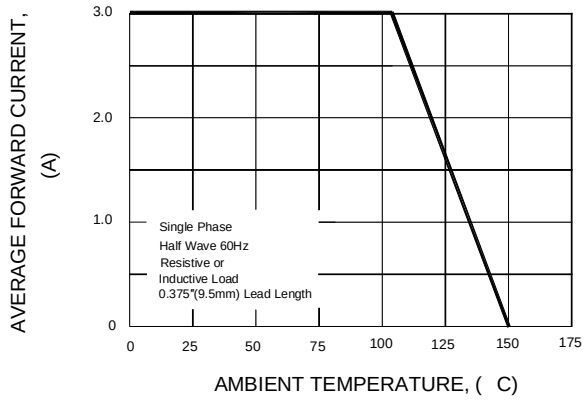


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

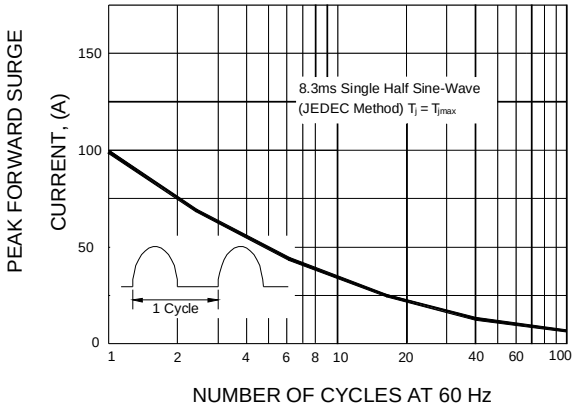


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

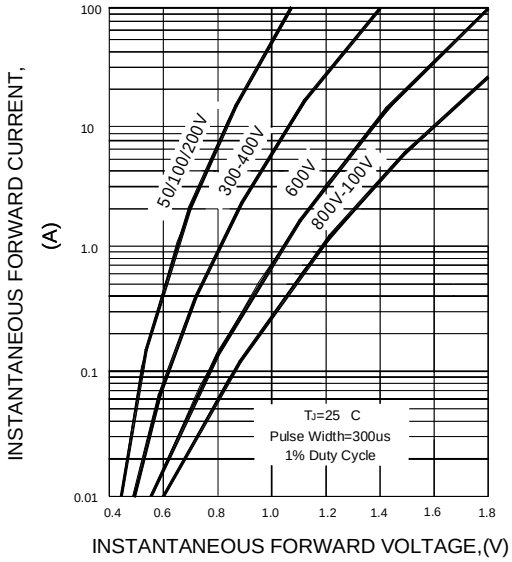


FIG.4-TYPICAL REVERSE CHARACTERISTICS

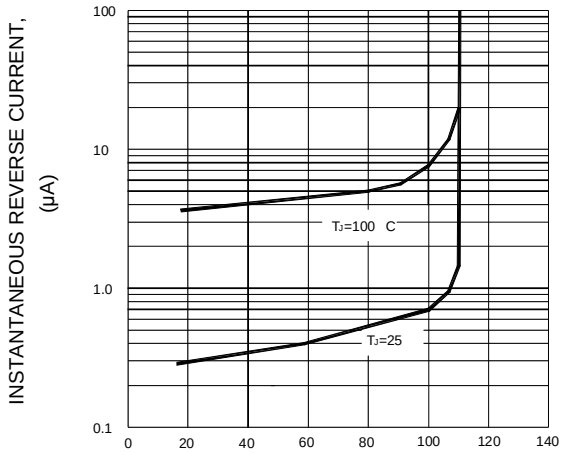
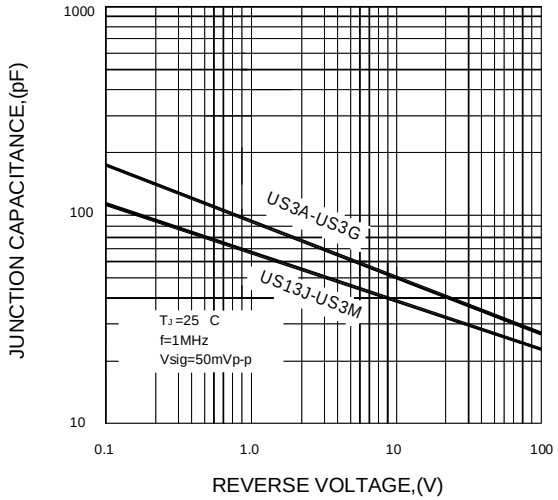
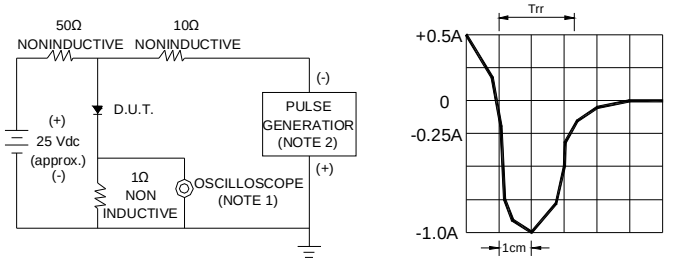


FIG.5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES : 1.Rise Time=7ns max. Input Impedance= 1 megohm. 22pF
2.Rise time=10ns max. Source Impedance= 50 ohms

SET TIME BASE FOR 50/100ns/cm