CURRENT 2.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

US2AAF THRU US2MAF

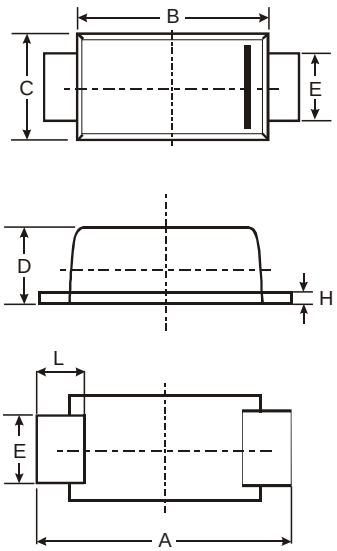
FEATURES

- Plastic package has UL 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

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: 0.0018ounce, 0.062 gram

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			

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%.

MAXIMUM RATINGS & THERMAL CHARACTERISTICS

PARAMETELS	SYMBOLS	US2A	US2B	US2D	US2G	US2J	US2K	US2M	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)	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							Amps
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.0			1.3	1.7			Volts
Maximum DC Reverse Current At rated DC blocking voltage at T_A=25	I_R	5.0							UA
T_A=125		100							
Maximum Reverse Recovery Time Test conditions I_F=0.5A, I_R=1.0A, I_{RR}=0.25A	t_{rr}	50			100				nS
Typical Junstion Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	50			30				pF
Typical Thermal Resistance (NOTE 1)	$R_{\theta JA}$	75							/W
	$R_{\theta JL}$	17							
Operating Junction Temperature	T_J	(-55 to +150)							
Storage Tempetature Rang	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 2.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

US2AAF THRU US2MAF

RATING AND CHRACTERISTIC CURVES US2A Thru US2M

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

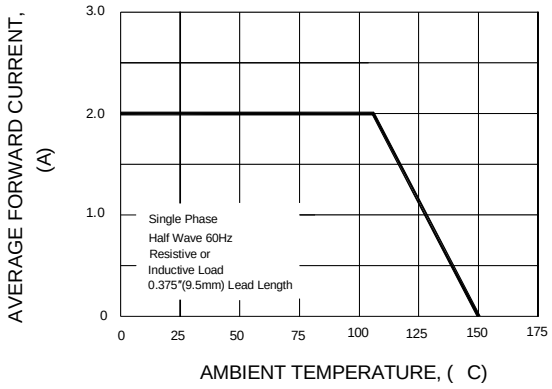


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

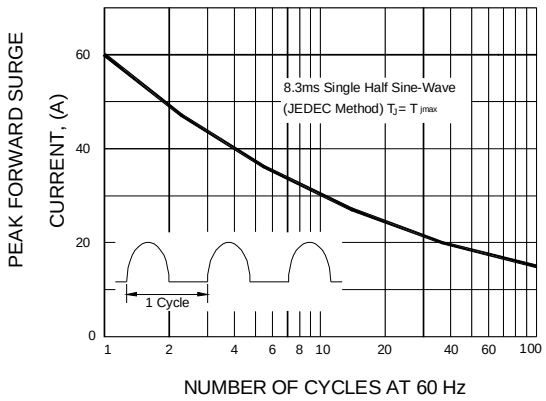


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

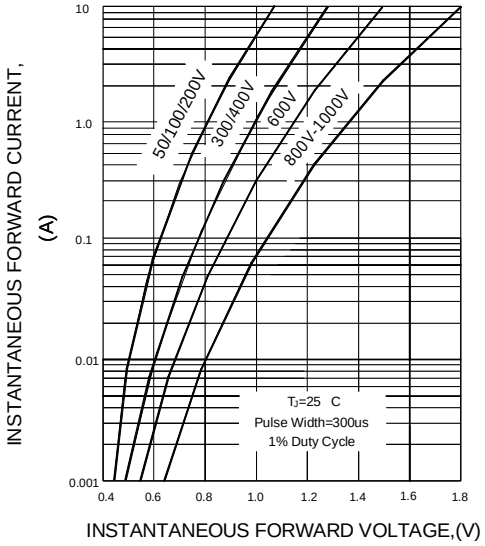


FIG.4-TYPICAL REVERSE CHARACTERISTICS

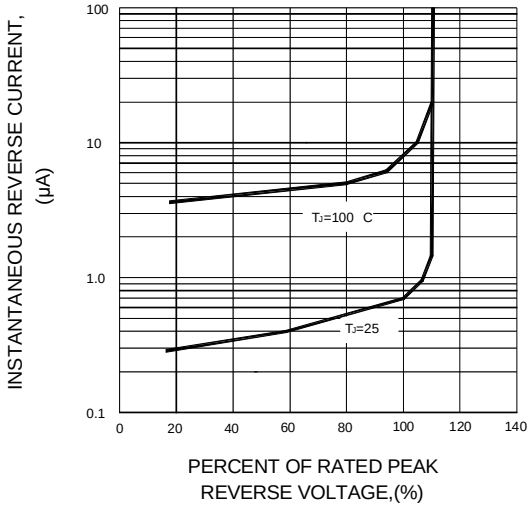
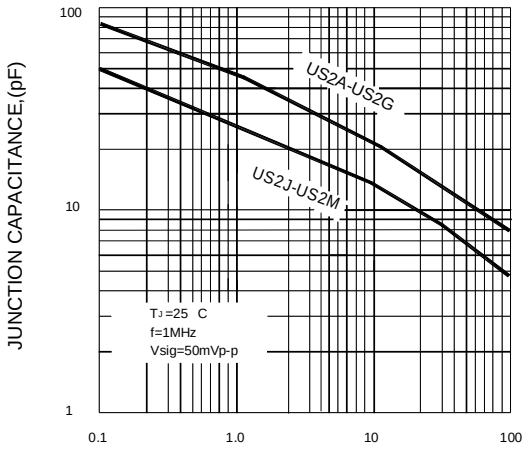
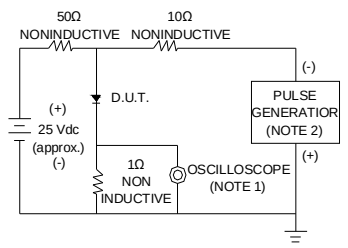
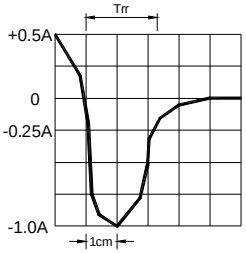


FIG.5-TYPICAL JUNCTION CAPACITANCE



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





SET TIME BASE FOR 50/100ns/cm

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