

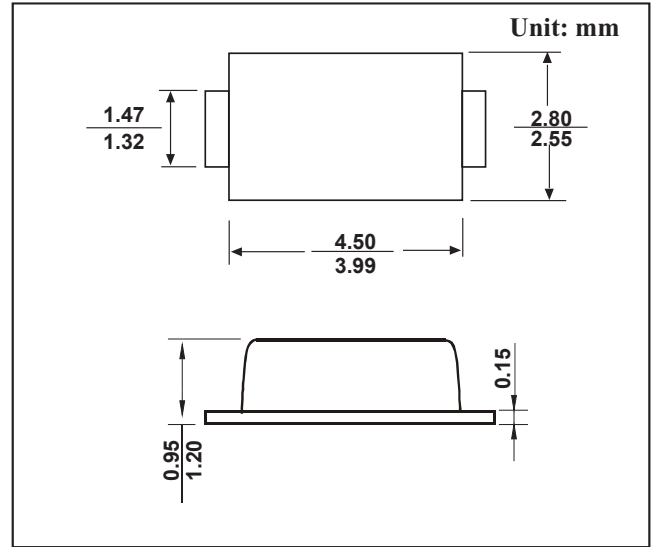
SMAF High Efficient Rectifier Diodes

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SMAF molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

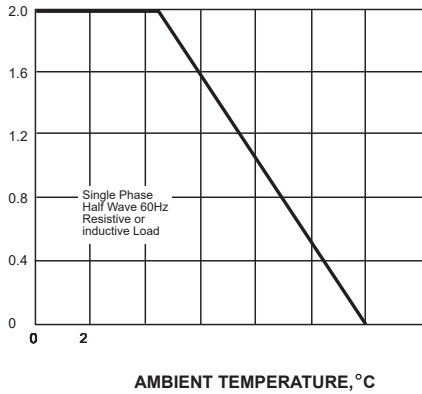
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	US2AF	US2BF	US2DF	US2GF	US2JF	US2KF	US2MF	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current.375"(9.5mm) Lead Length at Ta=55°C	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.0		1.4		1.7			V
Maximum reverse current at rated DC blocking voltage	@T _A =25°C	5.0							μA
	@T _A =100°C	50.0							
Maximum reverse recovery time (Note1)	t_{rr}	50				75			ns
Typical junction capacitance (Note2)	C_J	20							pF
Typical thermal resistance(Note3)	$R_{\theta JA}$	50							°C/W
Operating junction temperature range	T_J	- 55 ---- + 125							°C
Storage temperature range	T_{STG}	- 55 ---- + 150							°C

RATINGS AND CHARACTERISTIC CURVES

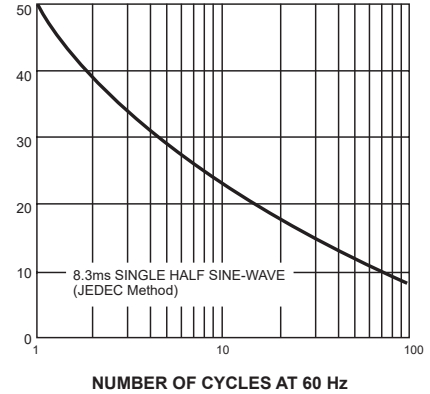
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



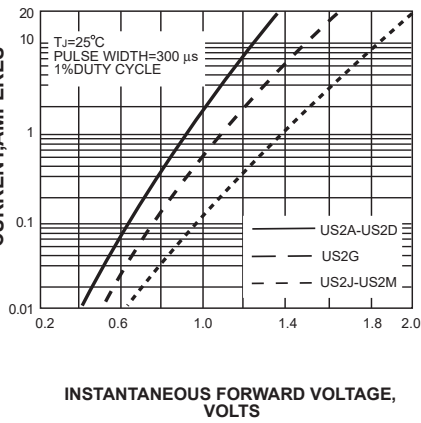
PEAK FORWARD SURGE CURRENT, AMPERES

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



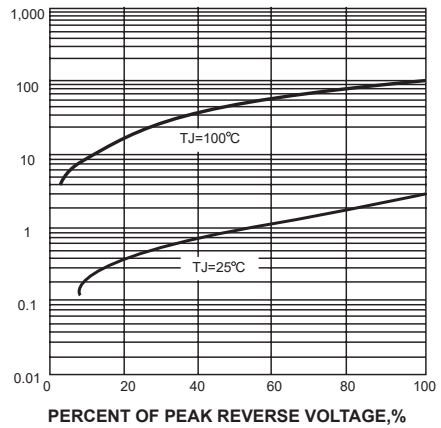
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



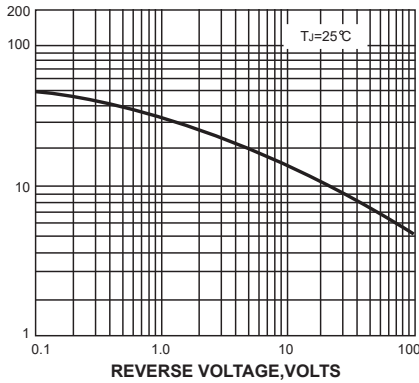
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

