SURFACE MOUNT
GLASS ULTRA FAST RECTIFIERS

REVERSE VOLTAGE **- 50** to **1000** Volts
FORWARD CURRENT **- 3.0** Amperes

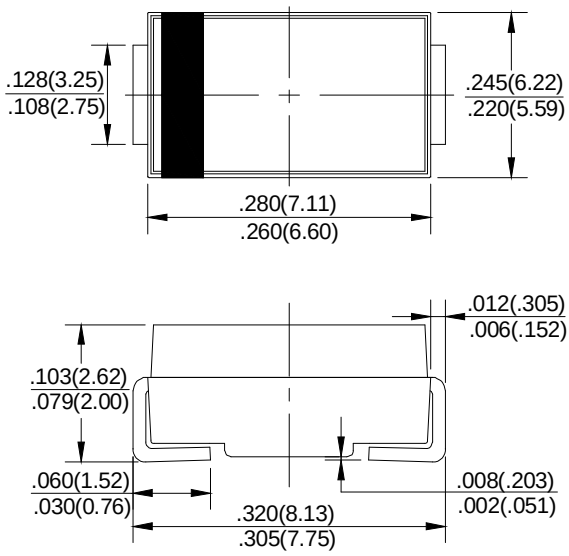
FEATURES

- Low cost
- Diffused junction
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case： Molded Plastic
- Polarity:Color band denotes cathode
- Weight: 0.007 ounces,0.21 grams
- Mounting position: Any

SMC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	UF3A	UF3B	UF3D	UF3G	UF3J	UF3K	UF3M	UNIT
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 @T_A =55 ℃	$I_{(AV)}$	3.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	150							A
Peak Forward Voltage at 3.0A DC(Note1)	V_F	1.0			1.3	1.7			V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=100℃	I_R	5.0 100							uA
Maximum Reverse Recovery Time(Note 1)	T_{RR}	50				75			nS
Typical Junction Capacitance (Note2)	C_J	50				30			pF
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	20							℃/W
Operating Temperature Range	T_J	-50 to +150							℃
Storage Temperature Range	T_{STG}	-50 to +150							℃

NOTES: 1.Measured with I_F=0.5A，I_R=1A ，I_{RR}=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction to ambient

FIG. 1 – FORWARD CURRENT DERATING CURVE

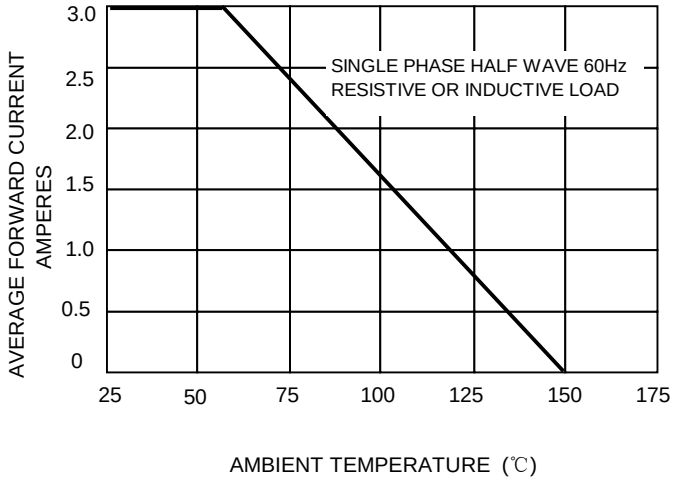


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

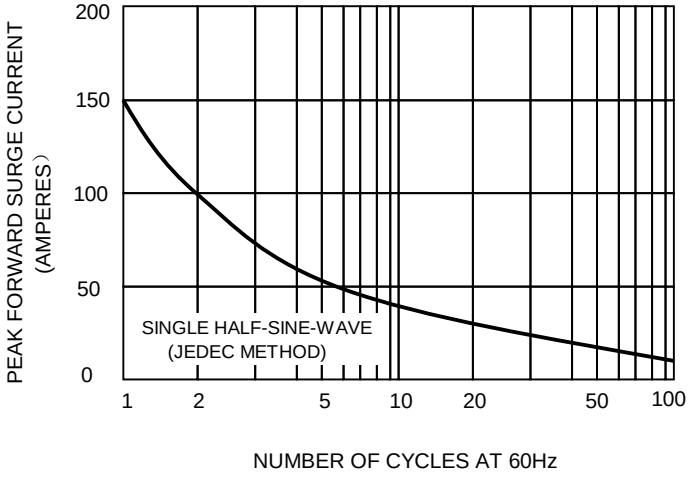


FIG.3 – TYPICAL JUNCTION CAPACITANCE

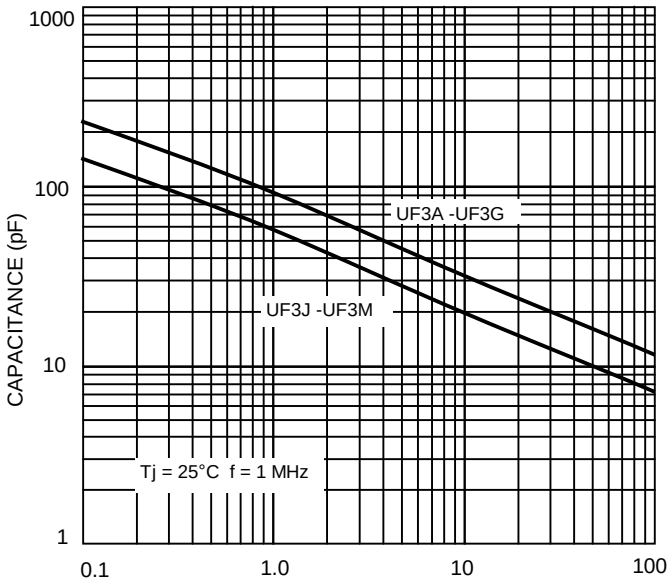


FIG.4-TYPICAL FORWARD CHARACTERISTICS

