



UF1AA thru UF1MA

SURFACE MOUNT ULTRA FAST RECTIFIERS	REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 1.0 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: Indicated by cathode band ● Weight: 0.002 ounces, 0.053 grams ● Mounting position: Any	A-SMA Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	UF1AA	UF1BA	UF1DA	UF1GA	UF1JA	UF1KA	UF1MA	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	580	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=55 ℃	I(AV)	1.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	30							A
Peak Forward Voltage at 1.0A DC	VF	1.0			1.3	1.7			V
Maximum DC Reverse Current @TJ=25℃ at Rated DC Blocking Voltage @TJ=100℃	IR	5.0 100							uA
Maximum Reverse Recovery Time(Note 1)	TRR	50				75			nS
Tyical Junction Capacitance (Note2)	CJ	20				10			pF
Tyical Thermal Resistance (Note3)	RθJA	25							℃/W
Operating Temperature Range	TJ	-50 to +125							℃
Storage Temperature Range	TSTG	-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 of ambient.



RATING AND CHARACTERISTIC CURVES
UF1AA thru UF1MA



FIG. 1 – FORWARD CURRENT DERATING CURVE

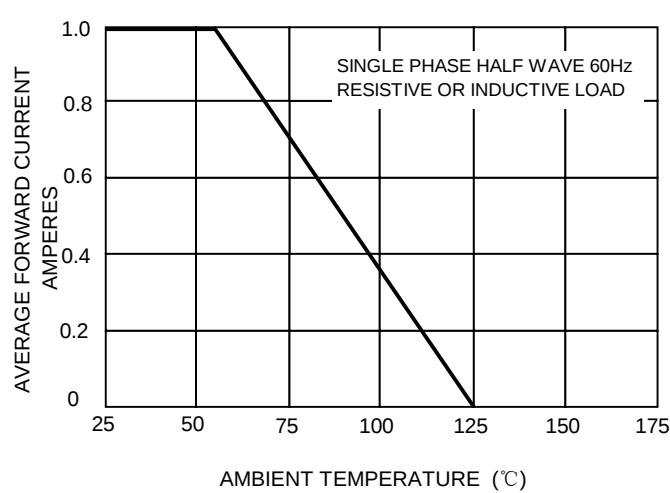


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

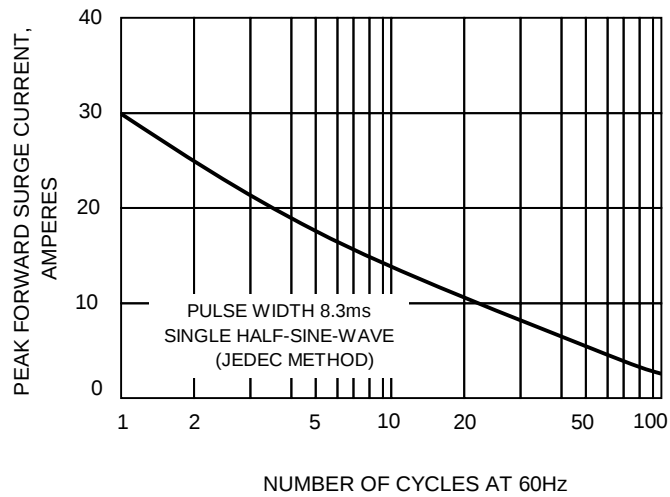


FIG.3 – TYPICAL JUNCTION CAPACITANCE

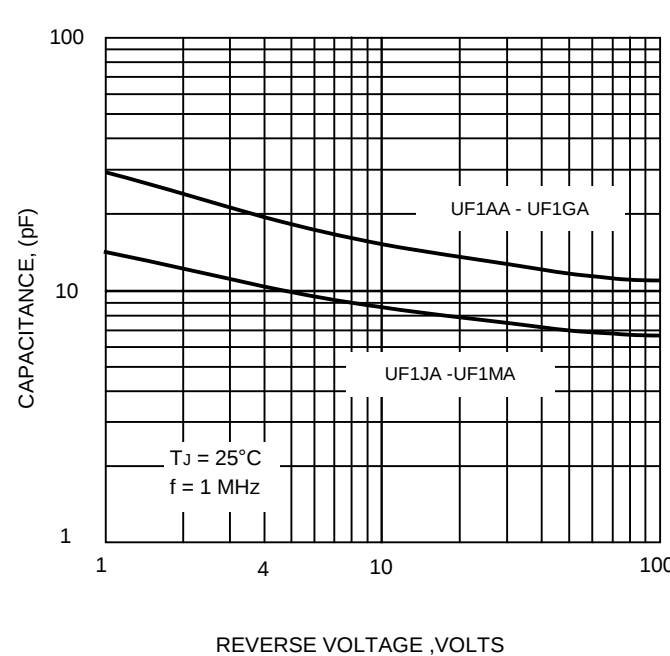


FIG.4-TYPICAL FORWARD CHARACTERISTICS

