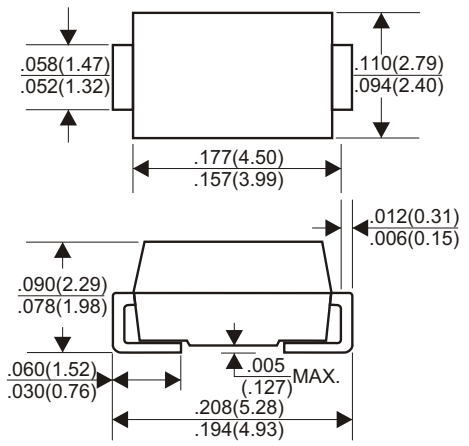
SURFACE MOUNT
HIGH EFFICIENCY RECTIFIERS

US2AA - US2MA

DO-214AC(SMA)



Dimensions in inches and (millimeters)

FEATURES

* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* Fast switching speed

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Metallurgically bonded construction
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.063 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 C ambient temperature uniess otherwies specified.Single phase half wave, 60Hz, resistive or inductive load.For capacitive load, derate current by 20%.

TYPE NUMBER	US2AA	US2BA	US2DA	US2EA	US2GA	US2JA	US2KA	US2MA	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=50℃	2.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	60								A
Maximum Instantaneous Forward Voltage at 2.0A	1.0			1.3		1.85			V
Maximum DC Reverse Current Ta=25℃	5.0								μA
at Rated DC Blocking Voltage Ta=100℃	150								μA
Maximum Reverse Recovery Time (Note 1)	50					70			nS
Typical Junction Capacitance (Note 2)	30								pF
Operating and Storage Temperature Range T_J, T_{STG}	-65 — +150								℃

NOTES: 1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

FIG.1-TYPICAL FORWARD CHARACTERISTICS

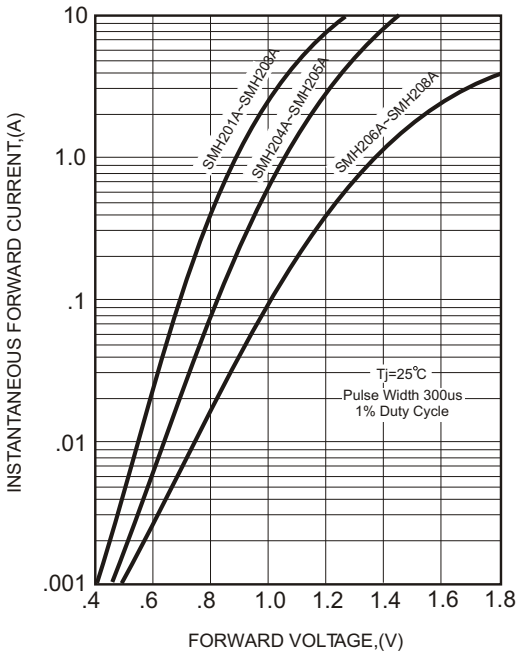


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

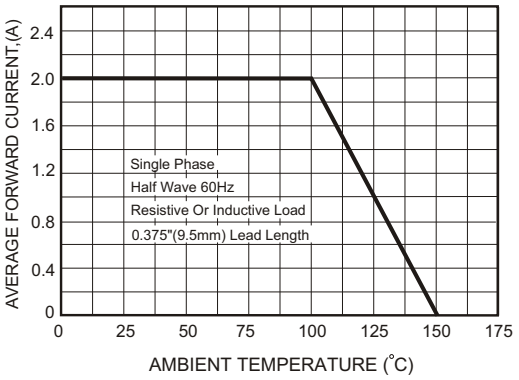
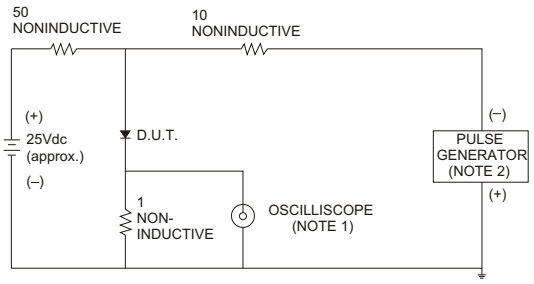


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

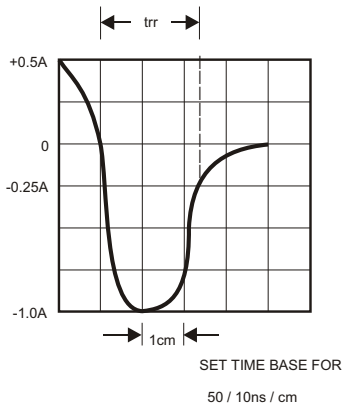


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

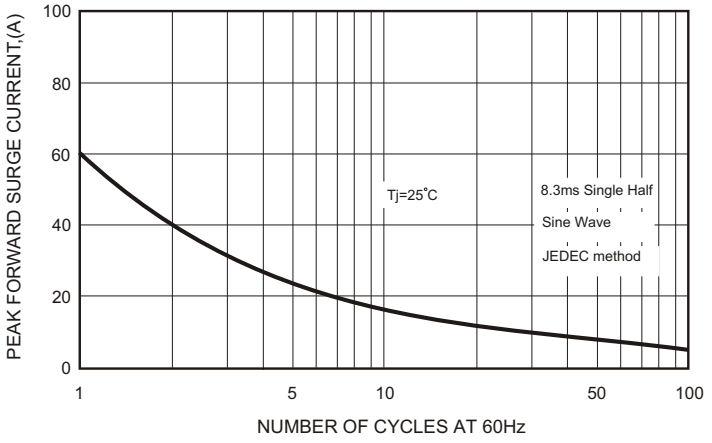
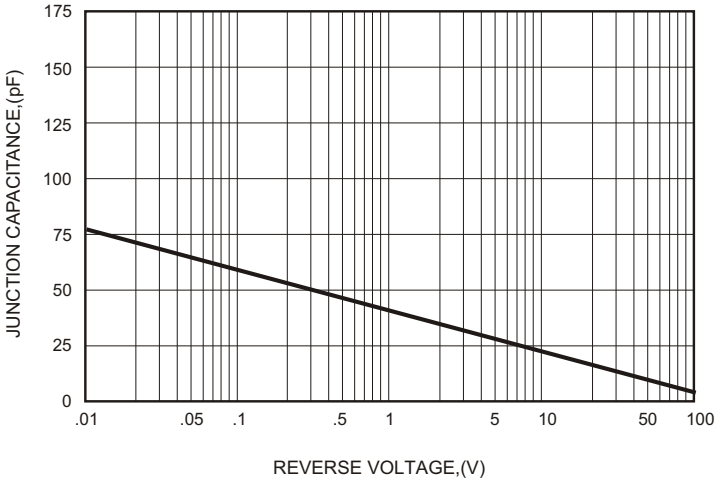



FIG.5-TYPICAL JUNCTION CAPACITANCE