

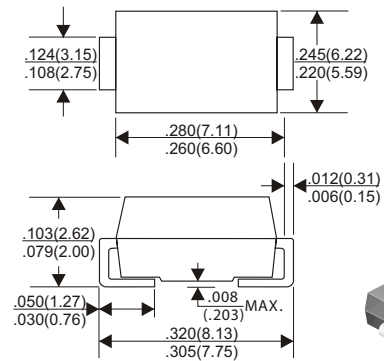
FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Super Fast switching speed under 35ns

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: 1.10 grams

DO-214AB(S MC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SUF501C	SUF502C	SUF503C	SUF504C	SUF505C	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	V
Maximum RMS Voltage	35	70	140	280	420	V
Maximum DC Blocking Voltage	50	100	200	400	600	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=55°C	5.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120					A
Maximum Instantaneous Forward Voltage at 5.0A	0.98		1.25		1.7	V
Maximum DC Reverse Current Ta=25°C	5.0					µA
at Rated DC Blocking Voltage Ta=100°C	80					µA
Maximum Reverse Recovery Time (Note 1)	35					nS
Typical Junction Capacitance (Note 2)	50					pF
Operating and Storage Temperature Range T _J , T _{STG}	-65~ +175					°C

NOTES:

1. Reverse Recovery Time test condition: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (SUF501C THRU SUF505C)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

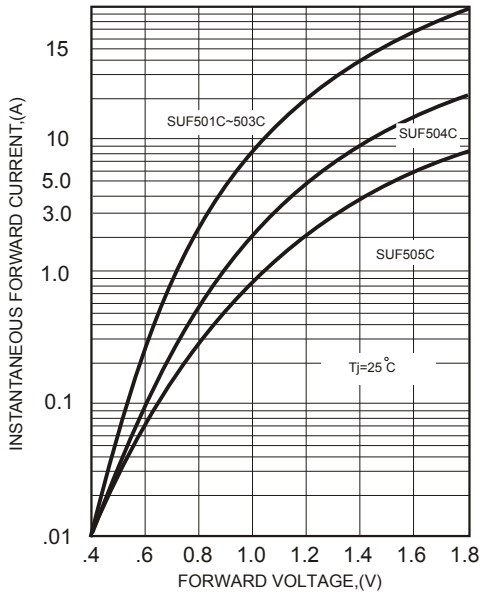


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

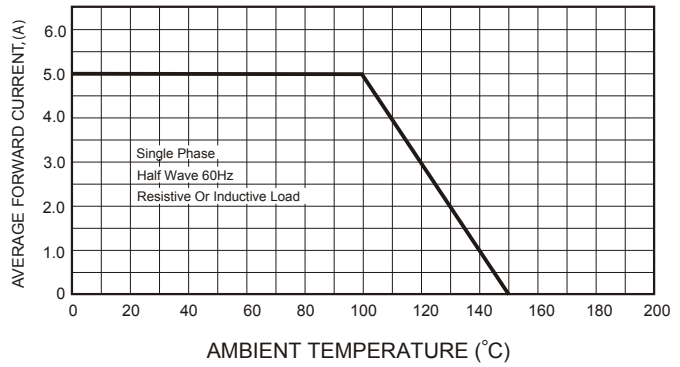


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

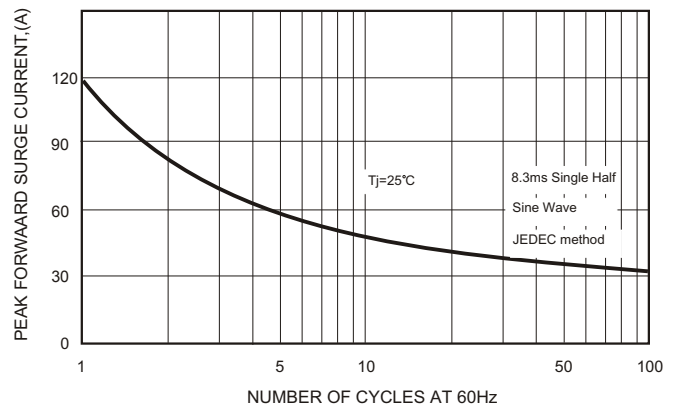
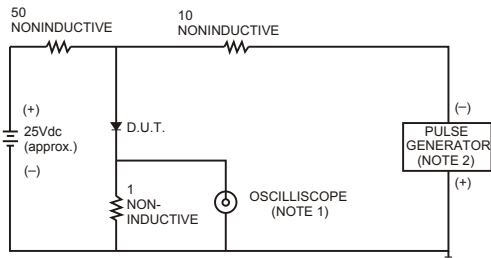


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

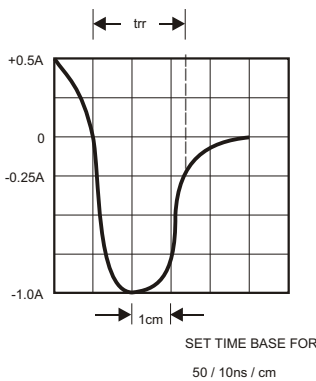


FIG.5-TYPICAL JUNCTION CAPACITANCE

