

RoHS Compliant Product

A suffix of "-C" specifies halogen-free

SMA

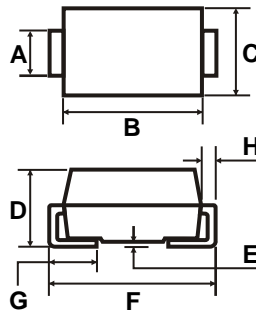


FEATURES

- * 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: 0.063 grams



	Dimensions in Millimeters		Dimensions in Inches	
	A	1.25	1.65	0.049
B	3.99	4.60	0.157	0.181
C	2.50	2.90	0.098	0.114
D	1.98	2.44	0.078	0.096
E	0.051	0.203	0.002	0.008
F	4.78	5.28	0.188	0.208
G	0.76	1.52	0.030	0.060
H	0.152	0.305	0.006	0.012

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	SUF201A	SUF202A	SUF203A	SUF204A	SUF205A	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	2.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	50					A
Maximum Instantaneous Forward Voltage at 2.0A	0.95		1.25		1.7	V
Maximum DC Reverse Current Ta=25°C	5.0					µA
at Rated DC Blocking Voltage T a=100°C	80					µA
Maximum Reverse Recovery Time	35					nS
Typical Junction Capacitance (Note 1)	15					pF
Thermal Resistance, Junction to Ambient (Note 2) R _{θJA}	75					°C/W
Operating and Storage Temperature Range T _J , T _{STG}	-65 — +175					°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Device mounted FR-4 PCB 0.013mm

RATING AND CHARACTERISTIC CURVES (SUF201A THRU SUF205A)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

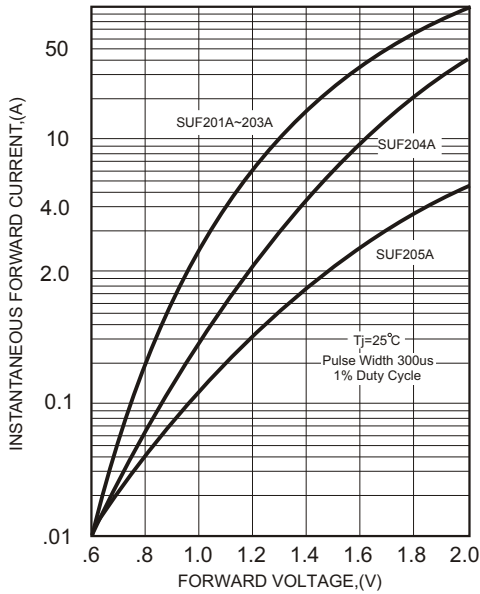


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

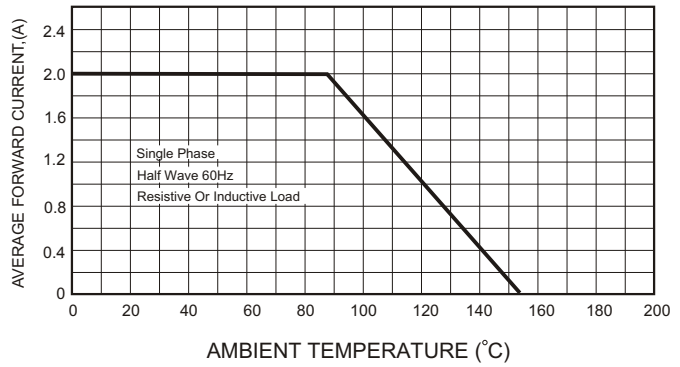


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

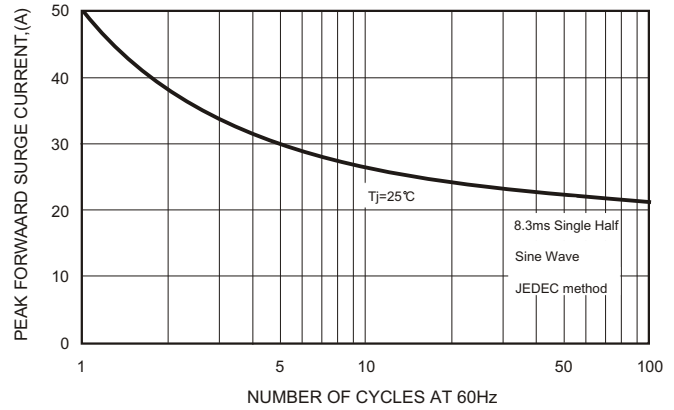
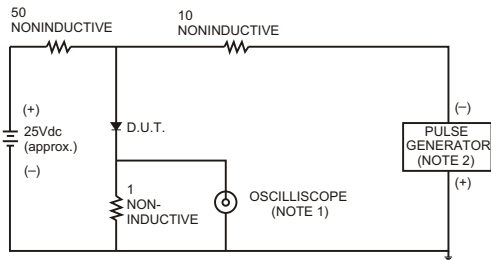


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

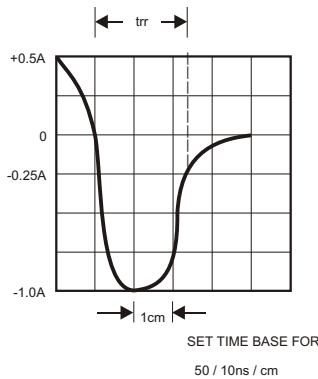


FIG.5-TYPICAL JUNCTION CAPACITANCE

