SUF501_5C

VOLTAGE 50V ~ 600V

5.0AMP Surface Mount Super Fast Recovery Rectifiers

Features

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

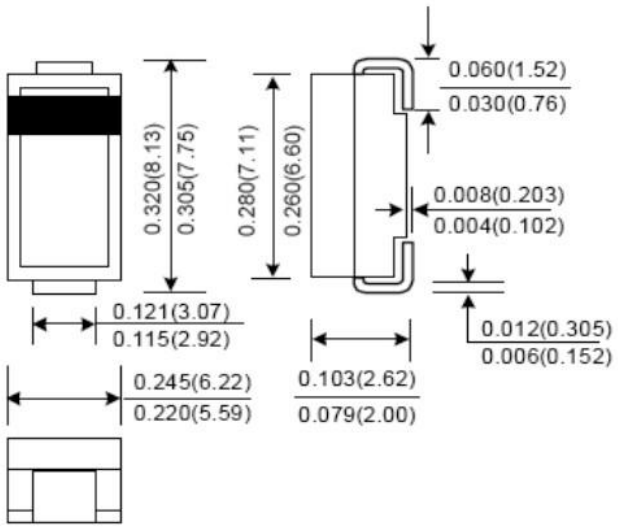
Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.229 grams

Packing &Order Information

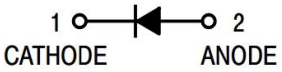
3,000/Reel

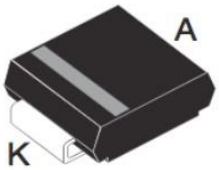
SMC (DO-214AB)



Dimensions in inches and (millimeter)

Graphic symbol





RoHS COMPLIANT

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	Unit
Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	V
Working 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

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TYPE NUMBER	**SUF501C**	**SUF502C**	**SUF503C**	**SUF504C**	**SUF505C**	**Unit**
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: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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■RATING AND CHARACTERISTIC CURVES (SUF501C THRU SUF505C)

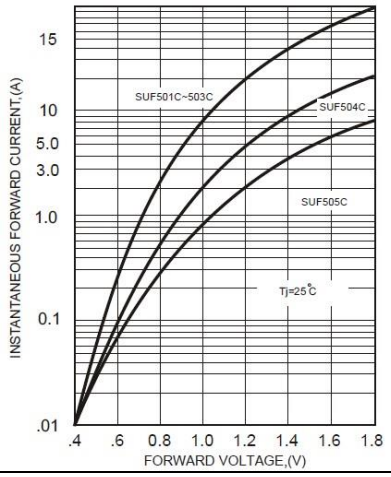


FIG.1-TYPICAL FORWARD CHARACTERISTICS

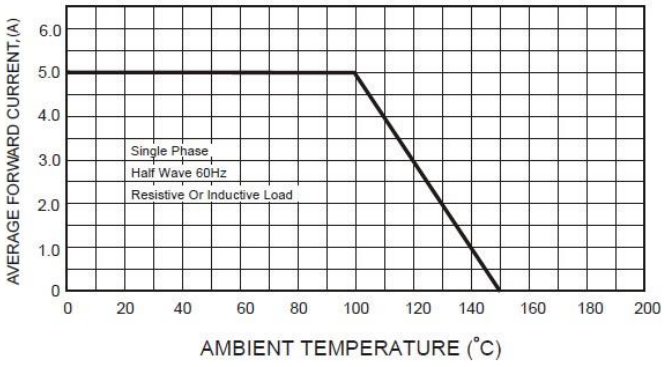


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

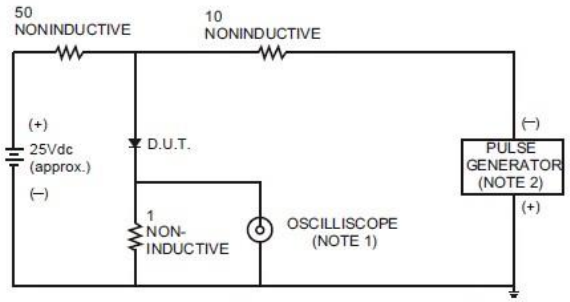


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS

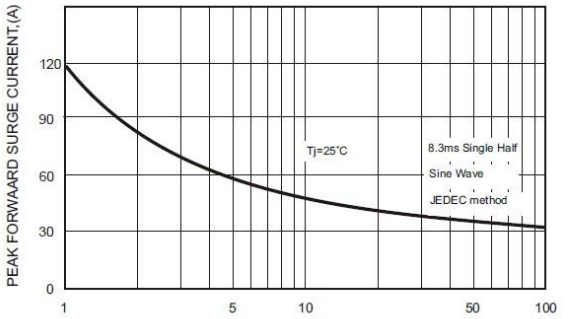
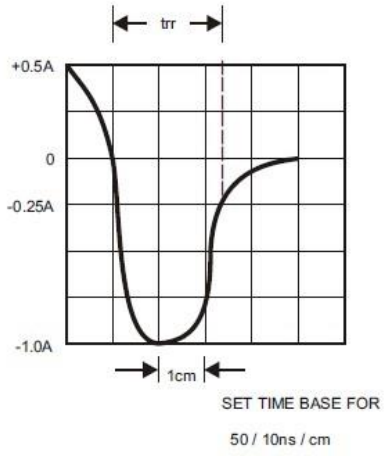


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



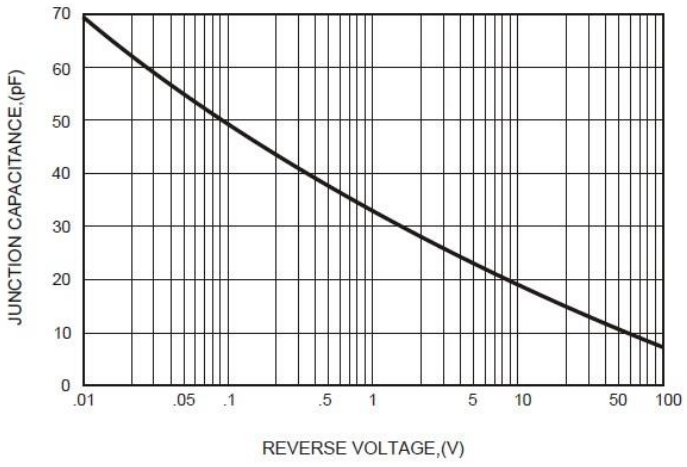


FIG.5-TYPICAL JUNCTION CAPACITANCE

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