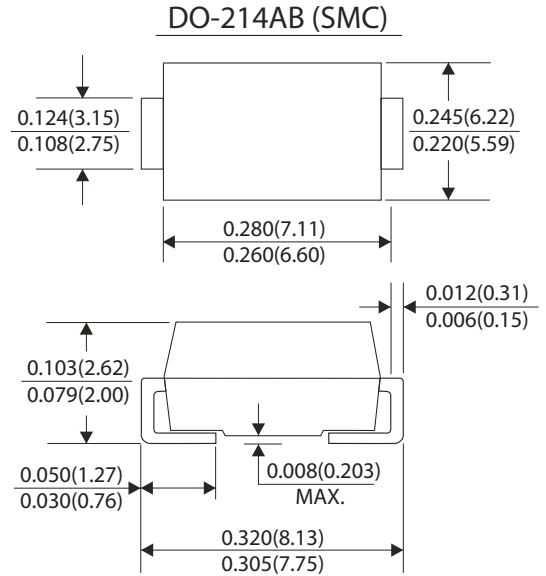


Features

- For surface mounted applications in order optimize board space
- Low profile package
- Built-in strain relief, ideal for automated placement
- Fast switching speed
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- Glass passivated junction
- High temperature soldering guaranteed : 250 °C /10 seconds, at terminals

Mechanical Data

- Case : JEDEC SMC(DO-214AB) molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.007ounce, 0.25 gram



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

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

	Symbols	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	Volts
Maximum average forward rectified current at T _L =75 °C	I _(AV)	3.0						Amps
Peak forward surge current 8.3ms half sing wave superimposed on rated load (JEDEC method) T _L =75 °C	I _{FSM}	100.0						Amps
Maximum instantaneous forward voltage at 1.5A	V _F	1.30						Volts
Maximum reverse current at rated voltage	T _A =25 °C	10.0						μA
	T _A =125 °C	250						
Maximum reverse recovery time (Note 1)	T _{rr}	150			250	500	ns	
Typical thermal resistance (Note 3)	R _{θJL}	15.0						°C/W
	R _{θJA}	50.0						
Typical junction capacitance (Note 2)	C _J	60.0						pF
Operating unction and storage temperature range	T _J T _{STG}	-55 to +150						°C

Notes:

- (1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.
- (3) Thermal resistance from junction to ambient and from junction to lead mounted on PCB mounted on 0.3×0.3"(8.0×8.0mm) copper opad areas.

RATINGS AND CHARACTERISTIC CURVES RS3A THRU RS3K

FIG.1-FORWARD CURRENT DERATING CURVE

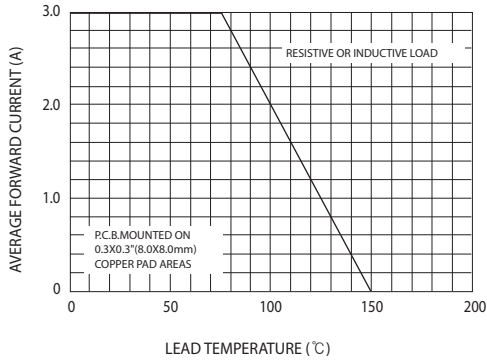


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

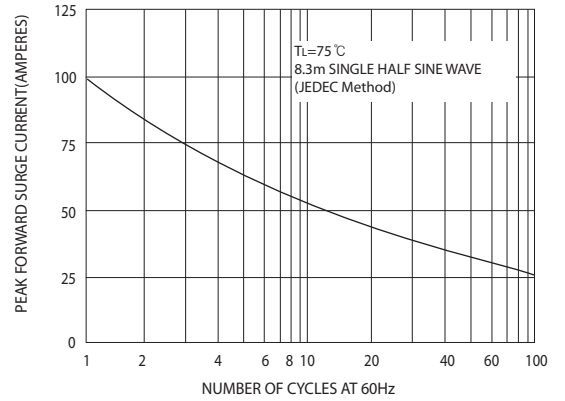


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

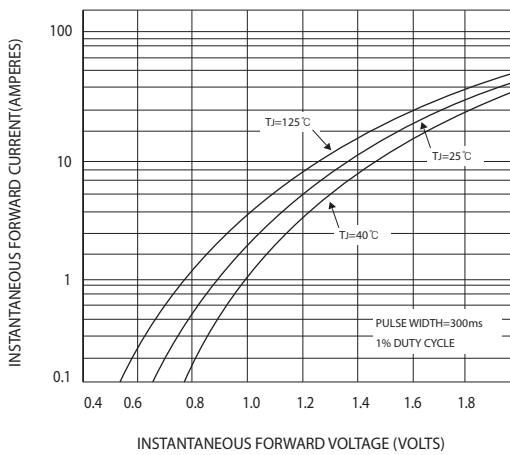


FIG.5-TYPICAL REVERSE CHARACTERISTICS

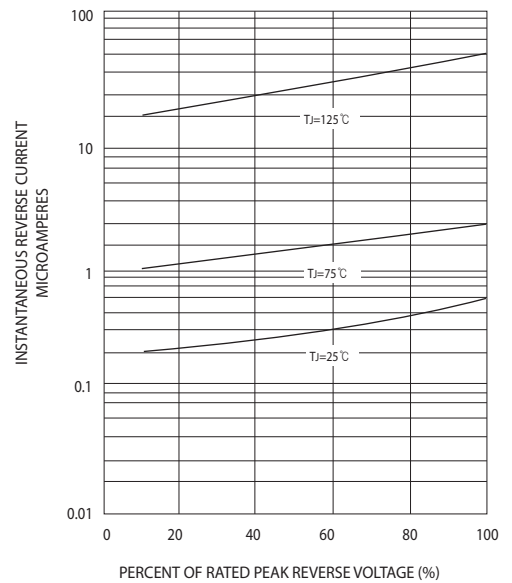


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

