

RS3A THRU RS3K

CURRENT 3.0 Amperes VOLTAGE 50 to 800 Volts

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 Unerwrites Laboratory Flammability Classification 94V-0
- · Low forward voltage drop
- · Glass passivated junction
- · High temperature soldering guaranteed : 250 $^{\circ}\text{C}/10$ seconds, at terminals

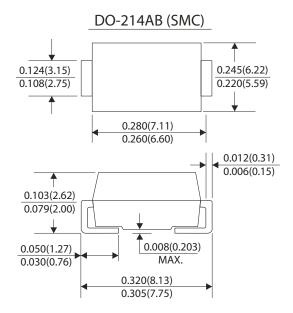
Mechanical Data

· 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 $^{\circ}$ 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		Vrrm	50	100	200	400	600	800	Volts
Maximum RMS voltage		Vrms	35	70	140	280	420	560	Volts
Maximum DC blocking voltage		VDC	50	100	200	400	600	800	Volts
Maximum average forward rectified current at TL=75 ℃		I(AV)	3.0						Amps
Peak forward surge current 8.3ms half sing wave superimposed on rated load (JEDEC method) TL=75 ℃		lfsm	100.0						Amps
Maximum instantaneous forward voltage at 1.5A		VF	1.30						Volts
Maximum reverse current at rated voltage	TA=25 ℃	l _R	10.0						
	Ta=125 ℃	IK IK	250						μ A
Maximum reverse recovery time (Note 1)		Trr	150			250	500	ns	
Typical thermal resistance (Note 3)		R⊖jl R⊖ja	15.0 50.0						°C/W
Typical junction capacitance (Note 2)		Cı	60.0						pF
Operating unction and storage temperature range		TJ Tstg	-55 to +150						°C

Notes:

- (1) Test conditions: IF=0.5A, IR=1.0A, Irr=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 " (8.0×8.0 mm) copper opad areas.



RATINGS AND CHARACTERISTIC CURVES RS3A THRU RS3K

FIG.1-FORWARD CURRENT DERATING CURVE

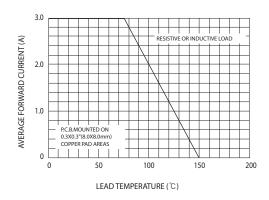


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

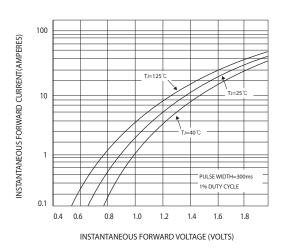


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

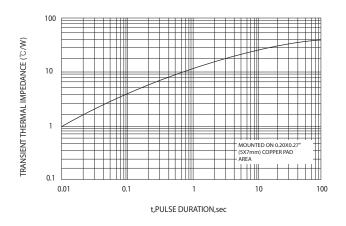


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

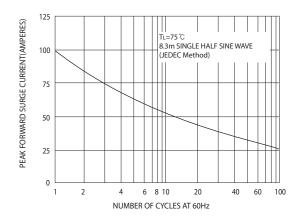


FIG.5-TYPICAL REVERSE CHARACTERISTICS

