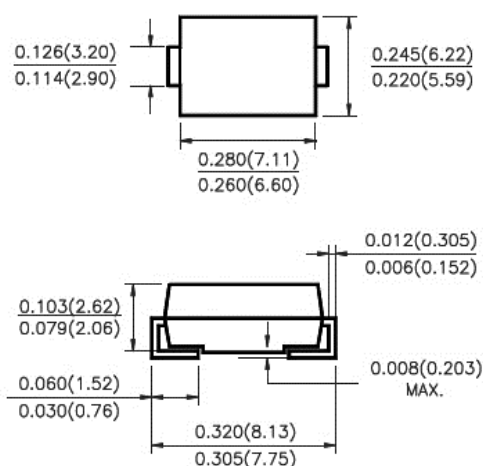


Kingtronics®**RS5A THRU RS5M****SURFACE MOUNT SUPER FAST RECTIFIER****REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 5.0 Ampere****FEATURES**

Plastic package has underwrites laboratory flammability Classification 94V-0
 For surface mounted applications
 Low profile package
 Built-in strain relief, ideal for automated placement
 Glass passivated chip junction
 High temperature soldering
 250°C/10 second at terminals

MECHANICAL DATA

Case: JEDED DO-214AA molded plastic over glass passivated chip
 Terminals: Solder plated, solderable per MIL-STD-750, method 2026
 Polarity: Color band denotes cathode end
 Weight: 0.007ounce, 0.25 gram

DO-214AB (SMC)**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified ,
MAXIMUM RATINGS & THERMAL CHARACTERISTICS

Dimensions in inches and (millimeters)

	SYMBOLS	RS5A	RS5B	RS5D	RS5G	RS5J	RS5K	RS5M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	47							°C/W
	$R_{\theta JL}$	13							
Operating junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

ELECTRICAL CHARACTERISTICS

TYPE NUMBER	SYMBOLS	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	UNIT
Maximum Instantaneous Forward Voltage at 5.0A	V_F	1.30							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0							uA
	$T_A = 125^\circ\text{C}$	50							
Typical Reverse Recovery Time at $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$	t_{rr}	150				250	500	ns	

1- Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with $0.3 \times 0.3''$ ($8.0 \times 8.0\text{mm}$) copper pad areas.

Kingtronics® International Company

RATINGS AND CHARACTERISTIC CURVES

FIG.1—FORWARD CURRENT DERATING CURVE

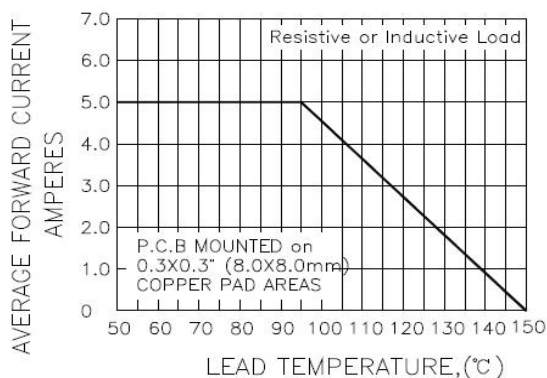


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

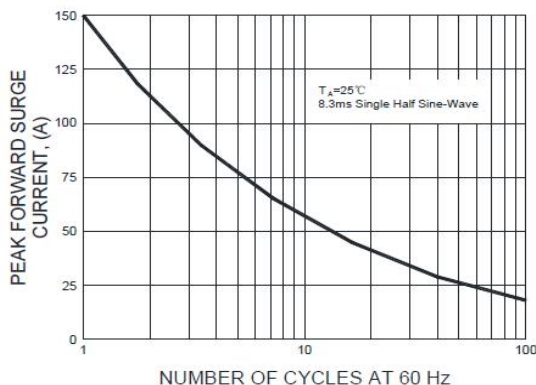


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

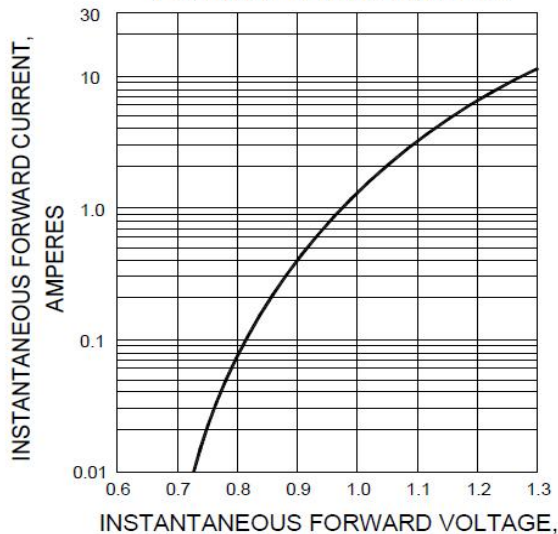


FIG.4-TYPICAL REVERSE CHARACTERISTICS

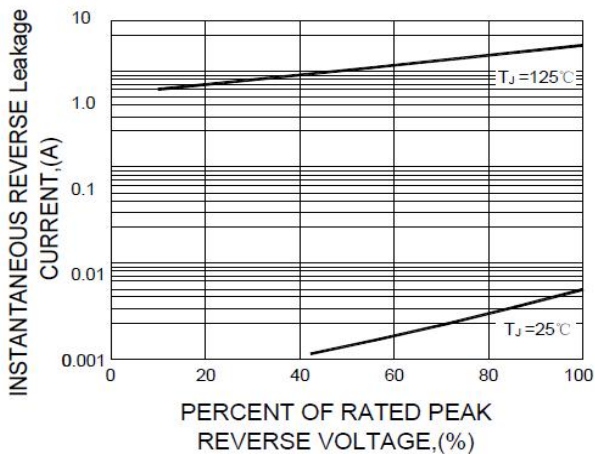


FIG.5—TYPICAL JUNCTION CAPACITANCE

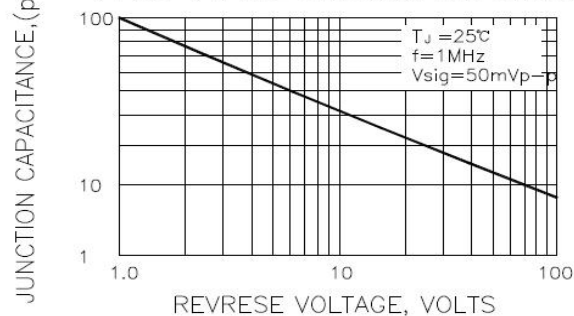
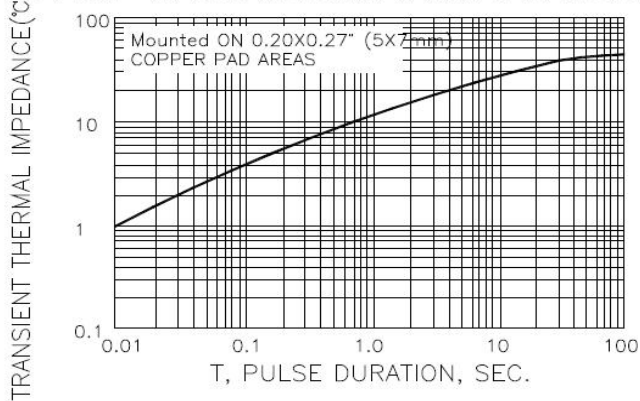


FIG.6—TYPICAL TRANSIENT THERMAL IMPEDANCE



Note: Specifications are subject to change without notice.