Kingtronics®

SS32 THRU SS310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 100 Volts **CURRENT** 3.0 Ampere

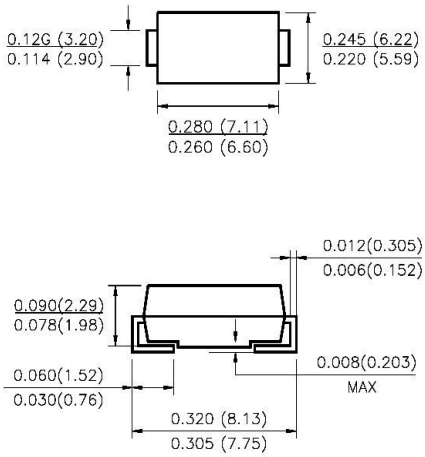
FEATURES

- Low profile surface mount package
- Built-in strain relief
- High switching speed
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters,
- Free willing, and polarity protection applications
- Guarding for over voltage protection

MECHANICAL DATA

Case: Transfer molded plastic
Epoxy: UL 94V-0 rate flame retardant
Lead: Solder plated, solderable per MIL-STD-750 method 2026
Polarity: Color band denotes cathode end
Weight: 0.007 ounce, 0.25 gram

DO-214AB (SMC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOLS	SS32	SS33	SS34	SS35	SS36	SS38	SS39	SS310	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current at TL see figure 1 T_L =105℃	$I_{(AV)}$	3.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80								Amps
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)	V_F	0.55			0.75		0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element — T_A = 25℃	I_R	0.5								uA
T_A = 100℃		20.0			10.0					
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55								℃/W
	$R_{\theta JL}$	12								
Operating Junction Temperature	T_J	-55 to +150			-55 to +150					℃
Storage Temperature Range	T_{STG}	-55 to +150								℃

1. Pulse test: 300μs pulse width,1% duty cycle
2. PCB mounted with 0.55"×0.55"(14mm×14mm) copper pads

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RATING AND CHRACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

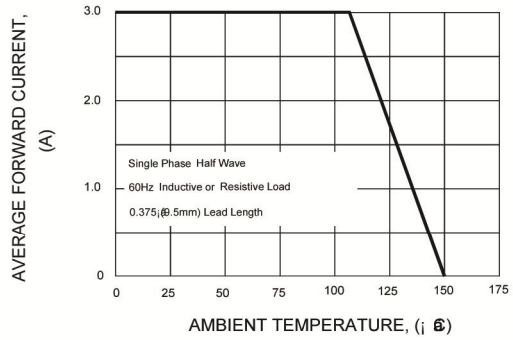


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

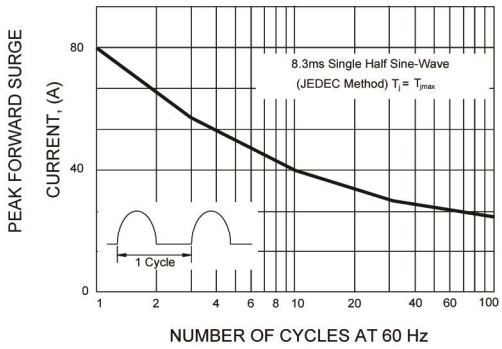


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

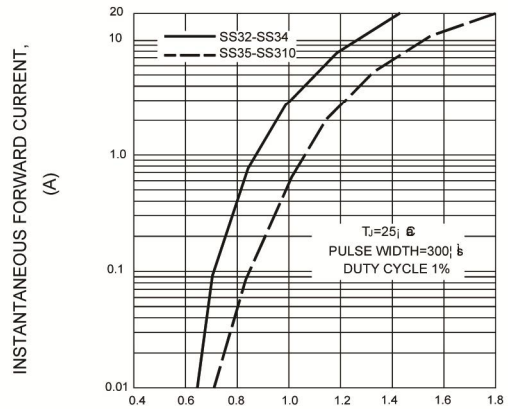


FIG.4-TYPICAL REVERSE CHARACTERISTICS

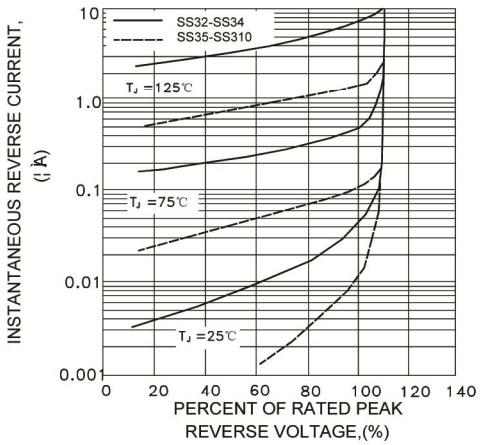
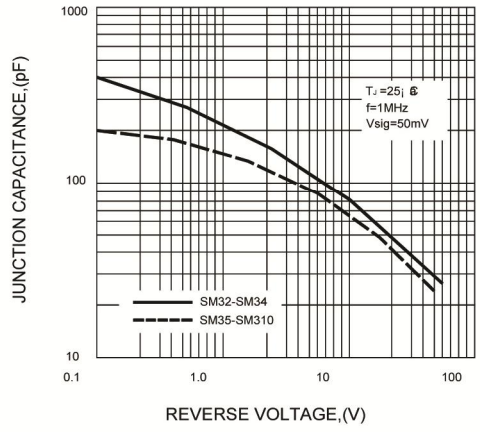


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice.