



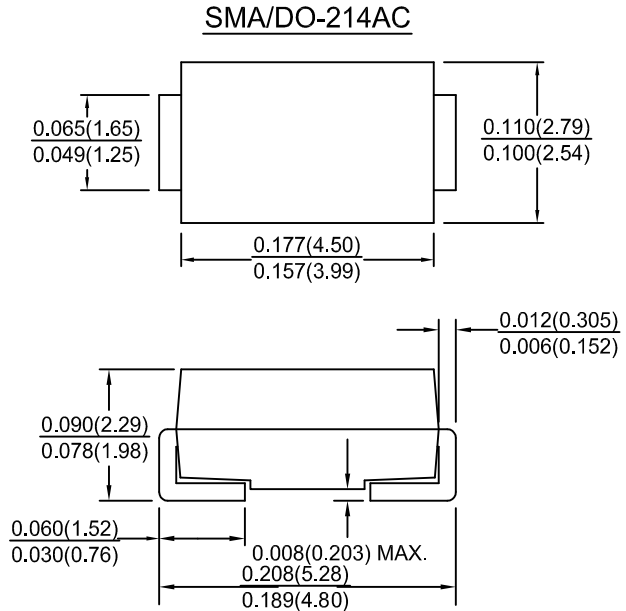
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guard ring for overvoltage protection
- High temperature soldering guaranteed: 250 °C /10 seconds at terminals

MECHANICAL DATA

Case : JEDEC DO-214AC molded plastic body
 Terminals : Solder plated, solderable per MIL-STD-750 Method 2026
 Polarity : Color band on body denotes cathode end
 Weight : 0.002 ounce, 0.064 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temp. unless otherwise specified.
 Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20 %.

Characteristic	Symbol	S32	S33	S34	S35	S36	S38	S39	S3A0	Units	
Maximum recurrent 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	64	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 FIG.1) TL=105 °C	I _(AV)	3.0								Amps	
Peak forward surge current 8.3mm single half sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	90.0								Amps	
Maximum instantaneous forward voltage at 3.0 A(NOTE 1)	V _F	0.50		0.70		0.85				Volts	
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1) Ta=25°C Ta=100°C	I _R	0.5					20.0				mA
Maximum thermal resistance(NOTE 2)	R _{th-JA} R _{th-JL}	55.0					17.0				°C/W
Operating junction temperature range	T _J	-65to+150								°C	
Storage temperature range	T _{stg}	-65to+150								°C	

NOTES:
 (1) Pulse test: 300 μs pulse width, 1% duty cycle
 (2) P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

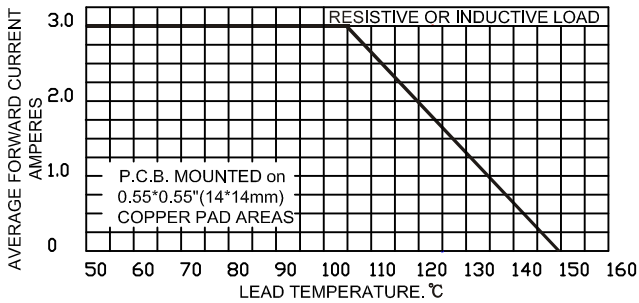


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

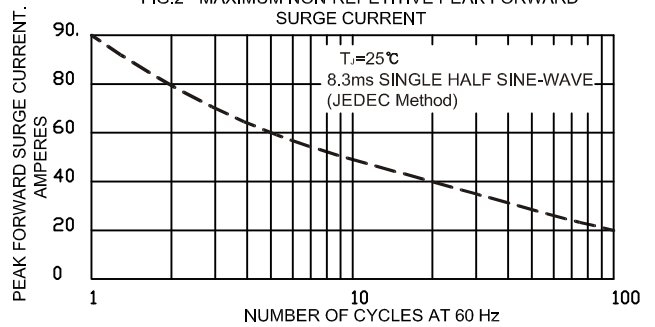


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

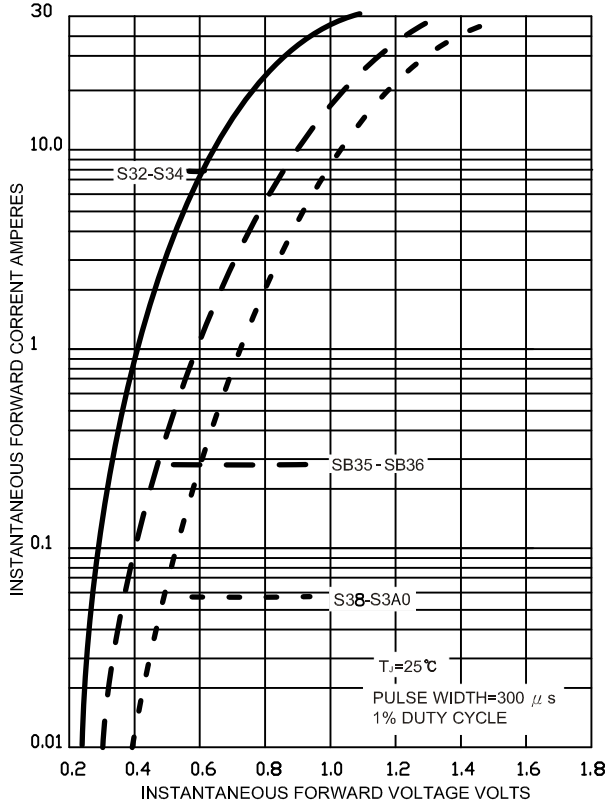


FIG.4-TYPICAL REVERSE CHARACTERISTICS

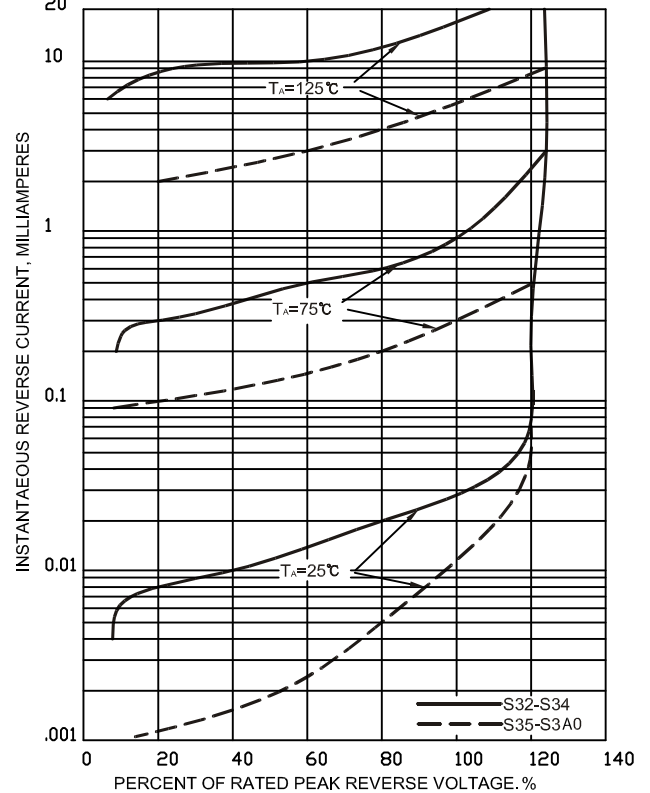


FIG.5-TYPICAL JUNCTION CAPACITANCE

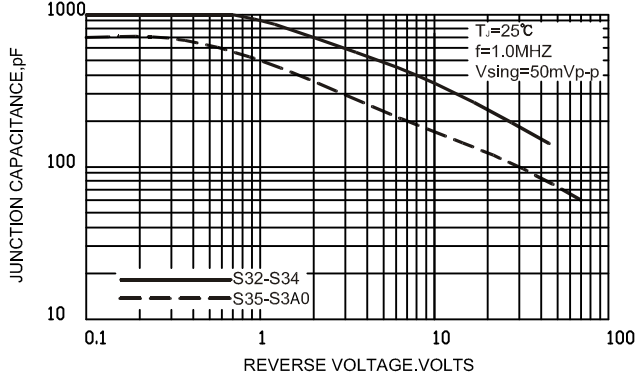
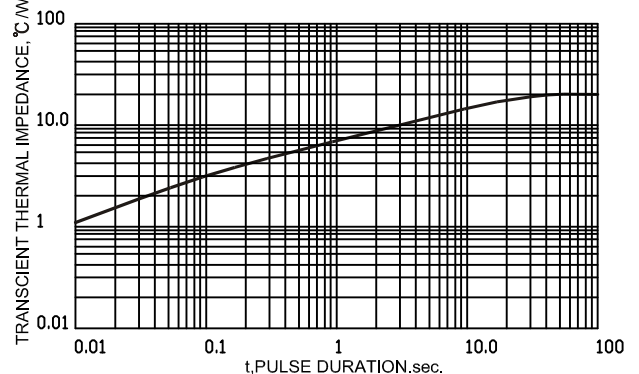


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE





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