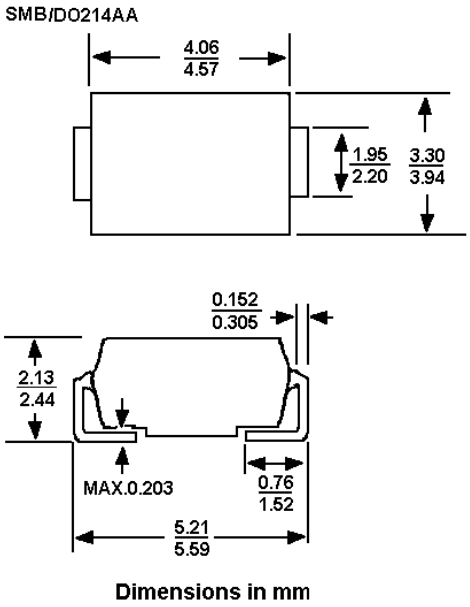
SS32 THRU SS3A

SCHOTTKY BARRIER RECTIFIERS
Reverse Voltage – 20 to 100 Volts
Forward Current – 3.0 Amperes



Dimensions in mm

Features

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Low power loss, high efficiency
- High current capability, Low forward voltage drop.
- Low profile package
- Built-in strain relief, ideal for automated placement
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250/10sec at terminals

Mechanical Data

- Case: JEDEC DO-214AA, molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

Absolute Maximum Ratings and Characteristics

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

	Symbols	SS32	SS33	SS34	SS35	SS36	SS38	SS3A	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	57	71	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current at 0.375"(9.5mm) lead length	$I_{F(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80							A
Maximum Instantaneous forward voltage at 3.0A (Note 1)	V_F	0.50			0.75		0.85		V
Maximum instantaneous reverse Current at rated DC blocking at voltage (Note 1) at T_A = 25?	I_R	1.5							mA
at T_A = 100?	I_R	20			10				
Typical junction capacitance	C_{tot}	250				160			pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	55.0							°C/W
	$R_{\theta JA}$	17.0							
Operating junction temperature range	T_J	-65 to +125				-65 to +150			°C
Storage temperature range	T_S	-65 to +150							°C

Notes: 1. Pulse test: 300μs pulse width, 1% duty cycle

2. P.C.B. mounted 0.55X.0.55"(14X14mm) copper pad areas

FIG. 1-FORWARD CURRENT DERATING CURVE

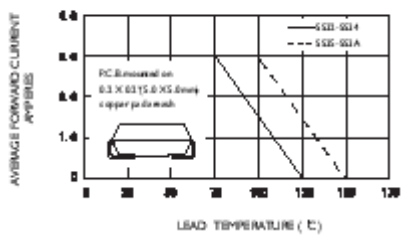


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

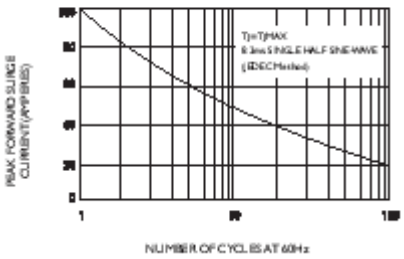


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

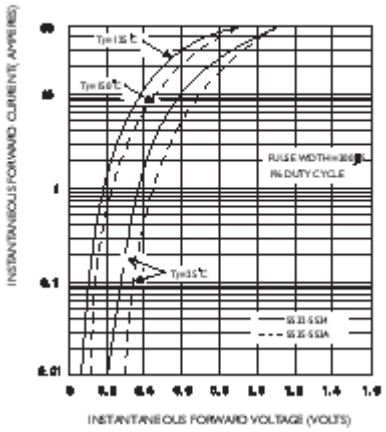


FIG.4-TYPICAL REVERSE CHARACTERISTICS

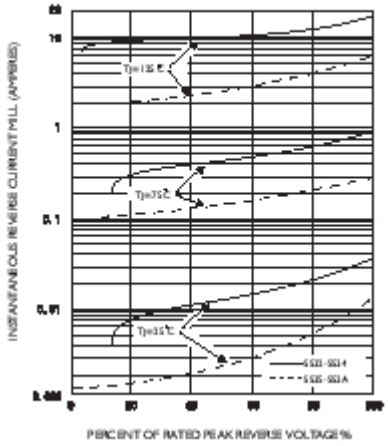


FIG.5-TYPICAL JUNCTION CAPACITANCE

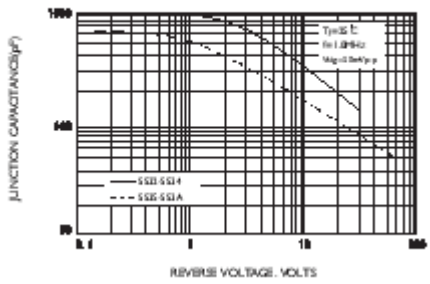


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE