



# SS32 THRU SS36

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

*Reverse Voltage - 20 to 60 Volts*

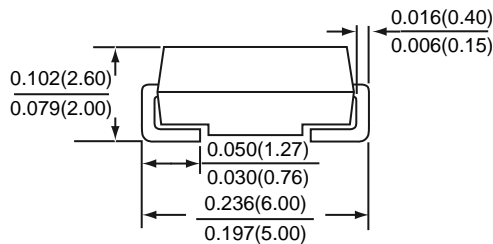
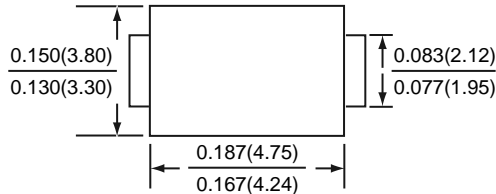
*Forward Current - 3.0 Amperes*

**SMB / DO-214AA**



### FEATURES

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* For surface mount 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
- \* Guardring for overvoltage protection
- \* High temperature soldering guaranteed : 260°C/10 seconds, at terminals



\*Dimensions in inches and (millimeters)

### MECHANICAL DATA

**Case :** JEDEC DO-214AA molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750D Method 2026

**Polarity :** Color band denotes cathode end

**Weight :** 0.003 ounces , 0.093 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

<i>Ratings at 25 °C ambient temperature unless otherwise specified.</i>		SYMBOLS	SS32	SS33	SS34	SS35	SS36	UNITS
Maximum repetitive peak reverse voltage		VRRM	20	30	40	50	60	Volts
Maximum RMS voltage		VRMS	14	21	28	35	42	Volts
Maximum DC blocking voltage		VDC	20	30	40	50	60	Volts
Maximum average forward rectified current (SEE FIG.1) (NOTE 2)		I(AV)	3.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	100					Amps
Maximum instantaneous forward voltage at 3.0 A (NOTE 1)		VF	0.50			0.75		Volts
Maximum DC reverse current at rated DC blocking voltage (NOTE 1)	TA=25°C	IR	0.5					mA
	TA=100°C		20			10		
Typical thermal resistance (NOTE 2)		R θJA	55					°C / W
		R θJL	17					
Operating junction temperature range		TJ	-55 to +125			-55 to +150		°C
Storage temperature range		TSTG	-55 to +150					°C

NOTES : (1) Pulse test : 300us pulse width, 1% duty cycle

(2) P.C.B. mounted with 0.55 x 0.55" ( 14 x 14mm ) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SS32 THRU SS36

FIG.1 - FORWARD CURRENT DERATING CURVE

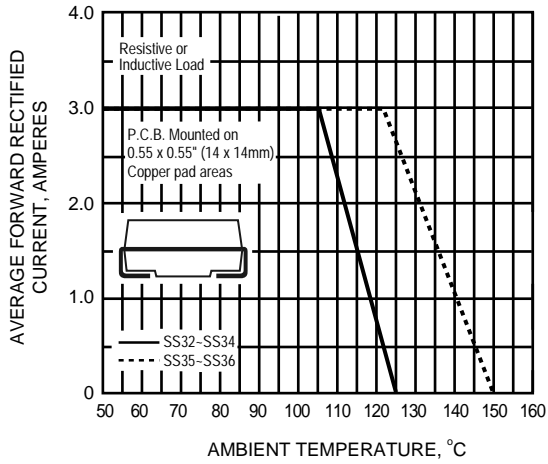


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

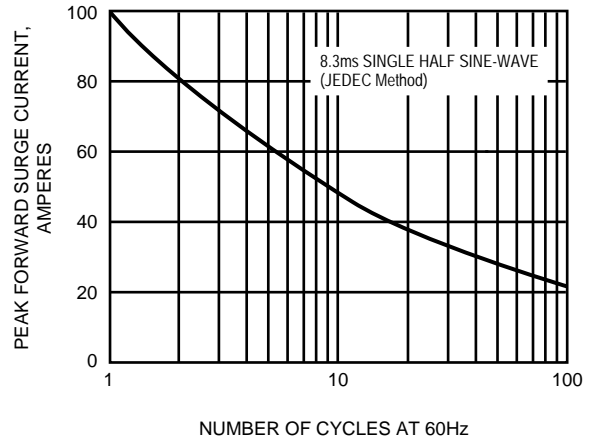


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

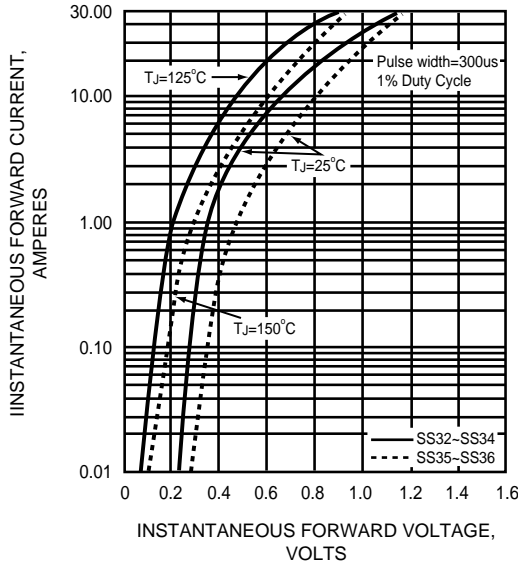


FIG.4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

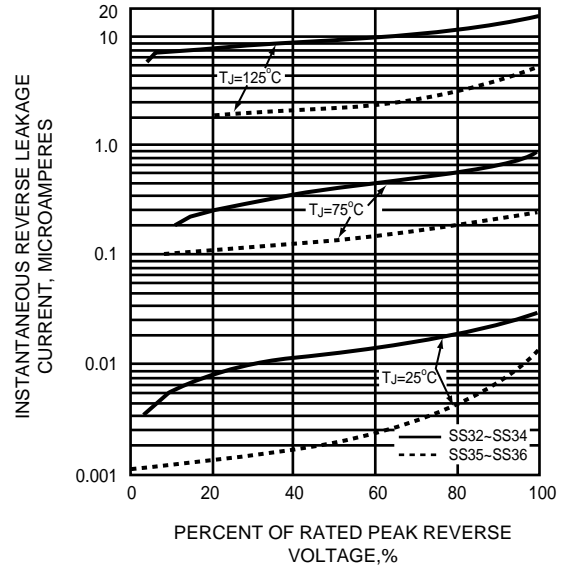


FIG.5 - TYPICAL JUNCTION CAPACITANCE

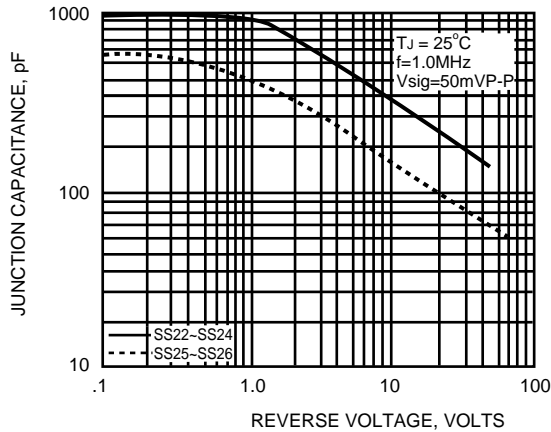


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

