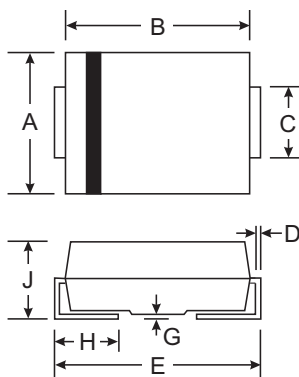


Features

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



SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Mechanical Data

- **Case:** JEDEC DO-214AB molded plastic body
- **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end
- **Weight:** 0.007 ounce 0.25 gram

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

	SYMBOLS	SS32	SS33	SS34	SS35	SS36	UNITS
Device marking code		S2	S3	S4	S5	S6	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	Volts
Maximum average forward rectified current at T _L (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)	I _{FSM}	100.0					Amps
Maximum instantaneous forward voltage at 3.0A (NOTE 1)	V _F	0.50			0.75		Volts
Maximum DC reverse current (NOTE 1) T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5					mA
		20.0			10.0		
Typical thermal resistance (NOTE 2)	R _{θJA} R _{θJL}	55.0 17.0					°C/W
Operating junction temperature range	T _J	-55 to +125			-55 to +150		°C
Storage temperature range	T _{STG}	-55 to +150					°C

NOTES:

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

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



FIG. 1 - FORWARD CURRENT DERATING CURVE

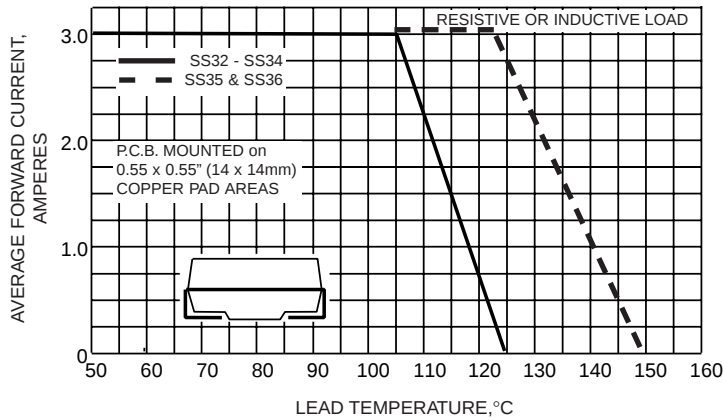


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

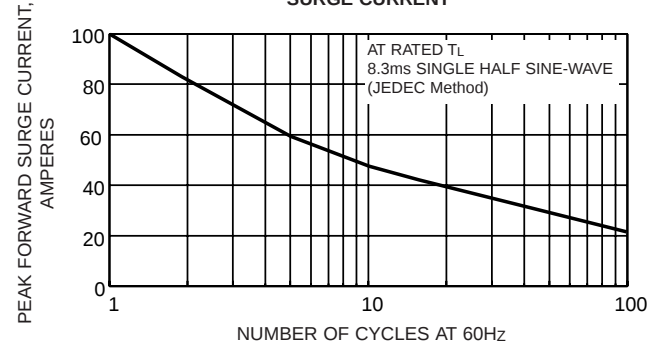


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

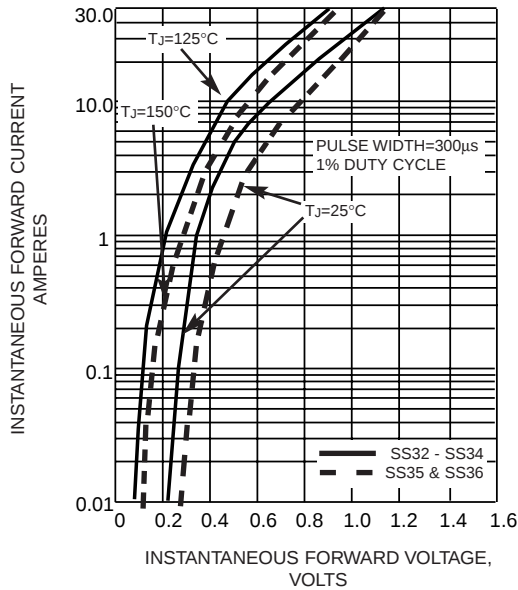


FIG. 4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

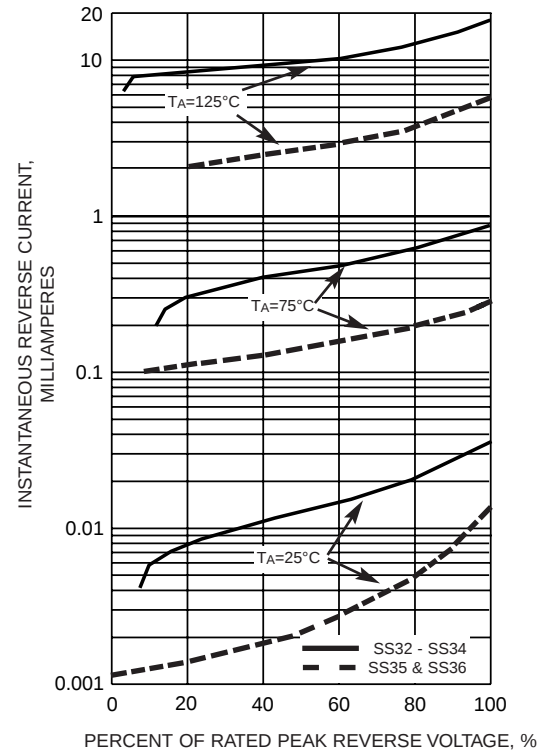


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

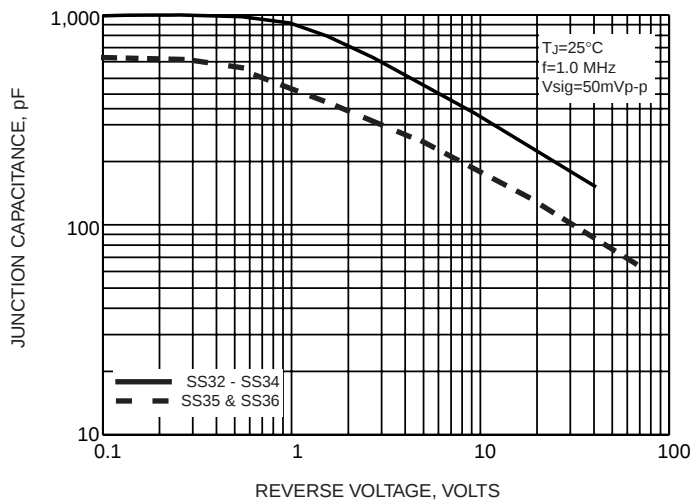


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

