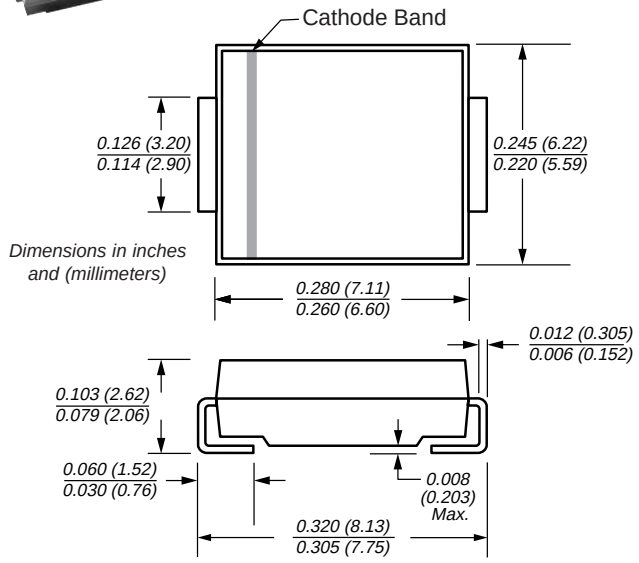
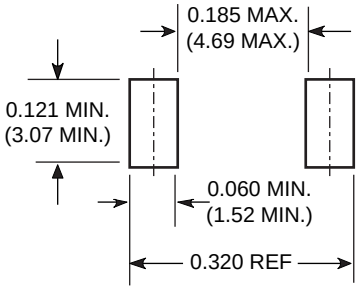
Surface Mount Schottky Rectifier

Reverse Voltage 20 to 60V
Forward Current 3.0A

DO-214AB (SMC)



Mounting Pad Layout



Mechanical Data

Case: JEDEC DO-214AB molded plastic body
Terminals: Solder plated, solderable per MIL-STD750, Method 2026
Polarity: Color band denotes cathode end
Weight: 0.007 oz., 0.25 g

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	SS32	SS33	SS34	SS35	SS36	Unit
Device marking code		S2	S3	S4	S5	S6	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	V
Maximum average forward rectified current at T_L (See Fig. 1)	$I_{F(AV)}$	3.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100					A
Typical thermal resistance(2)	$R_{\Theta JA}$ $R_{\Theta JL}$	55 17					°C/W
Operating junction temperature range	T_J	–55 to +125			–55 to +150		°C
Storage temperature range	T_{STG}	–55 to +150					°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Maximum instantaneous forward voltage at 3.0A (1)		V_F	0.50	0.75	V
Maximum DC reverse current at rated DC blocking voltage(1)	T_A=25°C	I_R	0.5		mA
	T_A=100°C		20	10	

Notes: (1) Pulse test: 300μs pulse width, 1% duty cycle
(2) P.C.B. mounted 0.55 x 0.55" (14 x 14mm) copper pad areas

Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

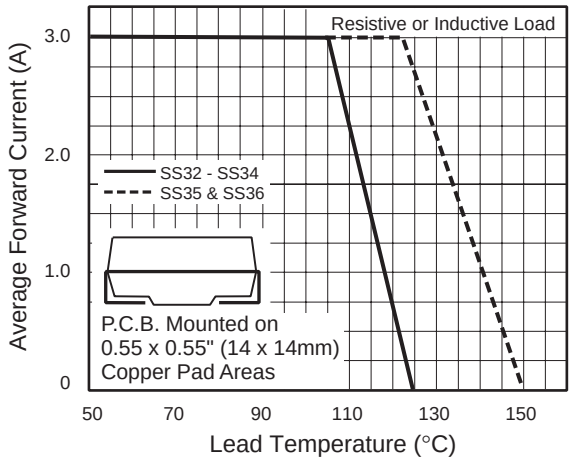


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

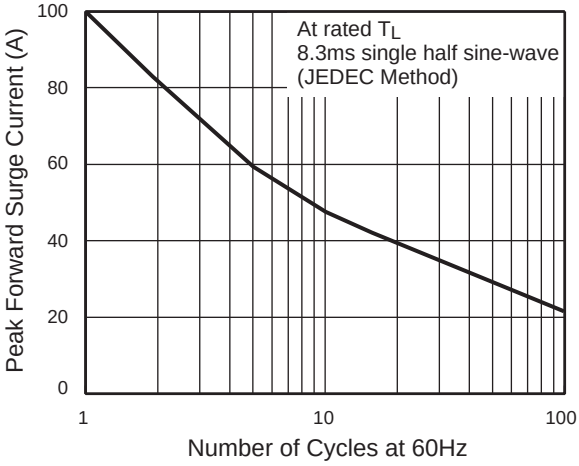


Fig. 3 - Typical Instantaneous Forward Characteristics

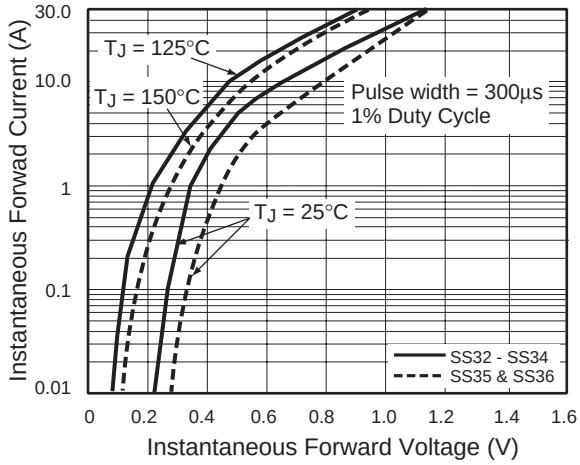


Fig. 4 - Typical Reverse Current Characteristics

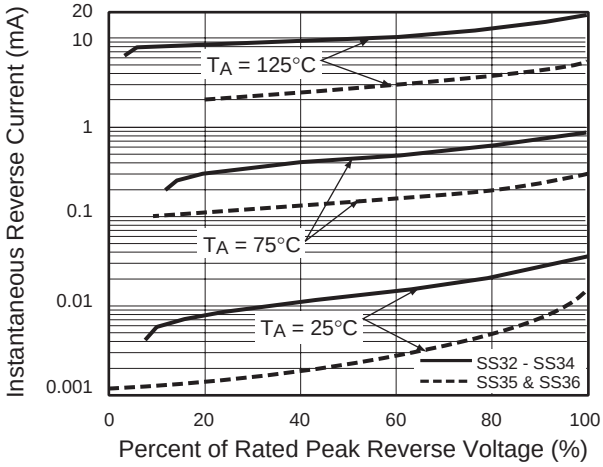


Fig. 5 - Typical Junction Capacitance

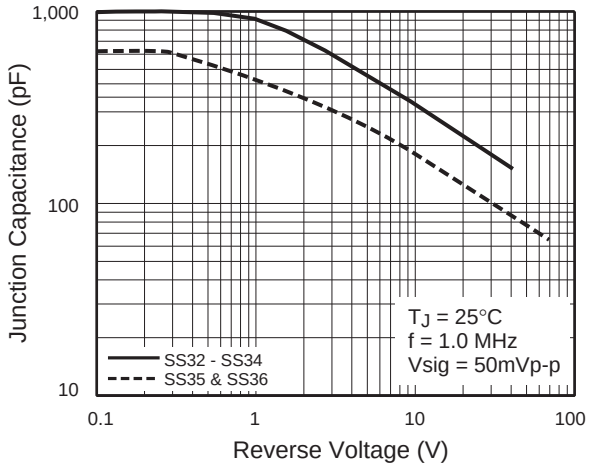


Fig. 6 - Maximum Non-repetitive Peak Forward Surge Current