



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SS32 THRU SS310

VOLTAGE RANGE 20 to 40 Volts

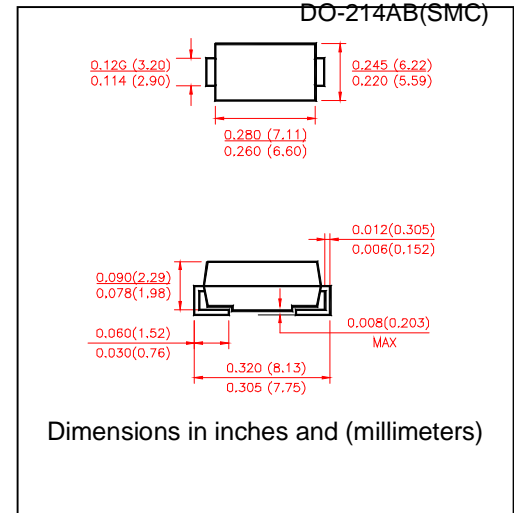
CURRENT 3.0 Ampere

FEATURES

- Low profile surface mount package
- Built-in strain relief
- High switching speed
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters, Free willing, and polarity protection applications
- Guarding for over voltage protection

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.007 ounce, 0.25 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	SS32	SS33	SS34	SS35	SS36	SS38	SS39	SS310	UNIT	
Maximum Repetitive 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	63	70	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	Volts	
Maximum Average Forward Rectified Current at T_L see figure 1 $T_L=105^\circ\text{C}$	$I_{(AV)}$	3.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80								Amps	
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)	V_F	0.55			0.75		0.85			Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ\text{C}$	0.5								mA	
	$T_A = 100^\circ\text{C}$	20.0			10.0						
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55								°C/W	
	$R_{\theta JL}$	12									
Operating Junction Temperature	T_J	(-55 to +150)				(-55 to +150)				°C	
Storage Temperature Range	T_{STG}	(-55 to +150)									°C

Notes:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. PCB mounted with 0.55" \times 0.55" (14mm \times 14mm) copper pads



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

SS32 THRU SS310

VOLTAGE RANGE 20 to 100 Volts
CURRENT 3.0 Ampere

RATING AND CHARACTERISTIC CURVES SS32 THRU SS310

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

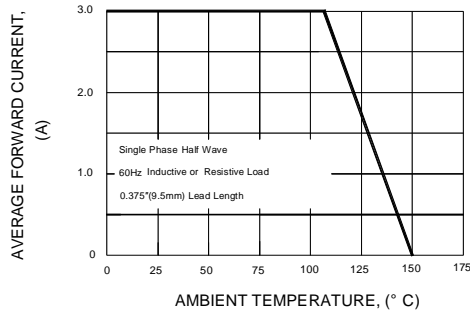


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

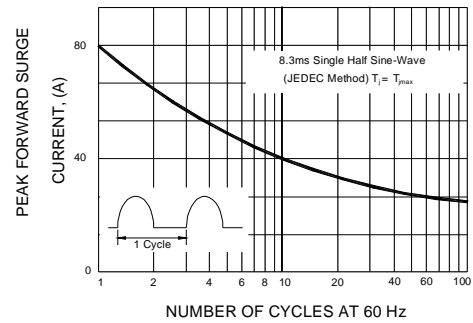


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

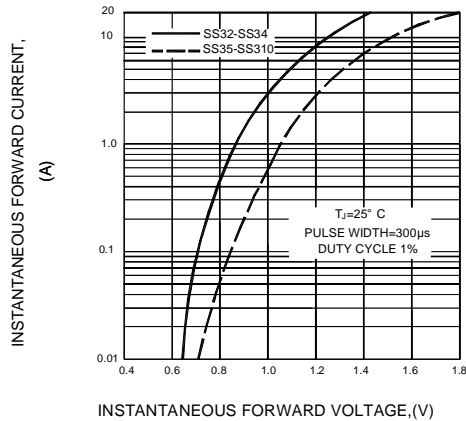


FIG.4-TYPICAL REVERSE CHARACTERISTICS

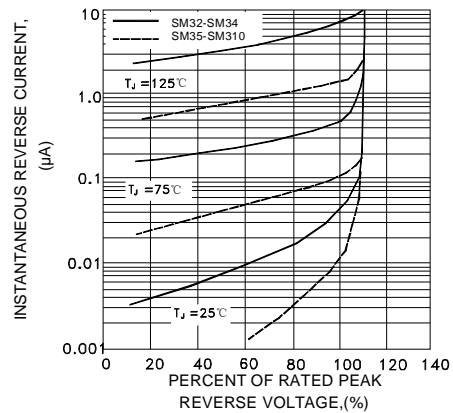


FIG.5-TYPICAL JUNCTION CAPACITANCE

