

SS52~SS520

5.0Amp Surface Mount Schottky Barrier Rectifiers

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds at terminals

Mechanical Data

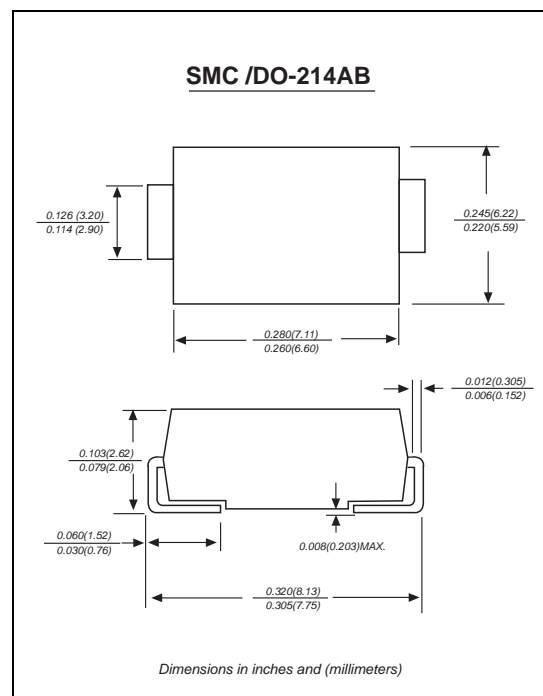
Case: JEDEC DO-214AB molded plastic body

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.007 ounce, 0.25 grams



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 current derate by 20%.

	SYMBOLS	SS52	SS54	SS56	SS58	SS510	SS515	SS520	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	56	70	105	150	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	VOLTS
Maximum average forward rectified current at $T_A=75^\circ\text{C}$	$I_{(AV)}$	5.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120.0							Amps
Maximum instantaneous forward voltage at 5.0A	V_F	0.55	0.70	0.85	0.95				Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5			0.2				mA
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		20.0		10.0		2.0			
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	85							C/W
Operating junction temperature range	T_J	-55 to +125			-55 to +150				$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1.P.C.B. mounted with 8.0x8.0mm copper pad areas

Ratings And Characteristic Curves

SS52 THRU SS520

FIG. 1- FORWARD CURRENT DERATING CURVE

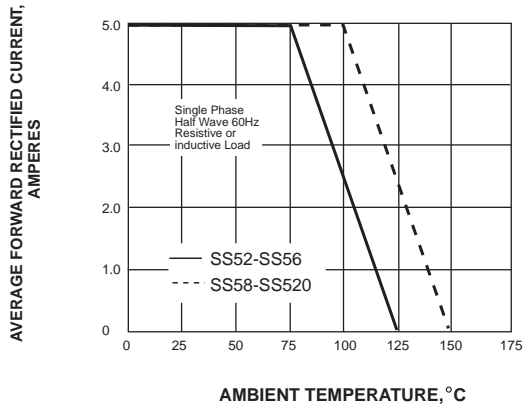


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

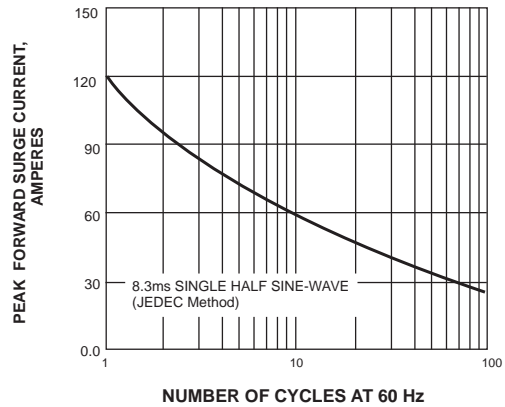


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

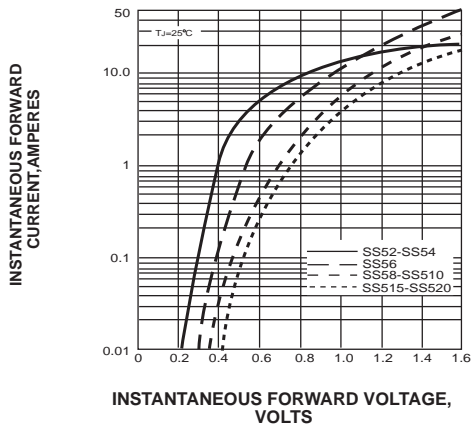


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

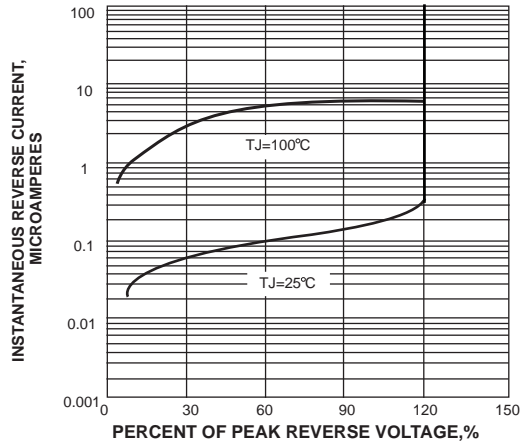


FIG. 5-TYPICAL TRANSIENT THERMAL IMPEDANCE

