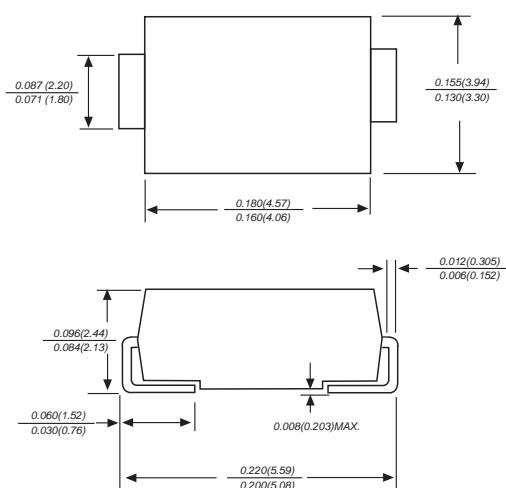


SS52 THRU SS510

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 5.0 Amperes

DO-214AA



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: leads solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.003 ounce, 0.093 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	SS53	SS54	SS55	SS56	SS58	SS510	UNITS				
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	V				
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	V				
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	V				
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	5.0						A					
Peak forward surge current	I _{FSM}	100.0						A					
8.3ms single half sine-wave superimposed on rated load													
Maximum instantaneous forward voltage at 5.0A	V _F	0.55		0.70		0.85		A	V				
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5		0.1		20		mA					
Typical junction capacitance (NOTE 1)	C _J	200							pF				
Typical thermal resistance (NOTE 2)	R _{θJA}	68.0							°C/W				
Operating junction temperature range	T _J	-55 to +125			-55 to +150				°C				
Storage temperature range	T _{STG}	-55 to +150							°C				

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS52 THRU SS510

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

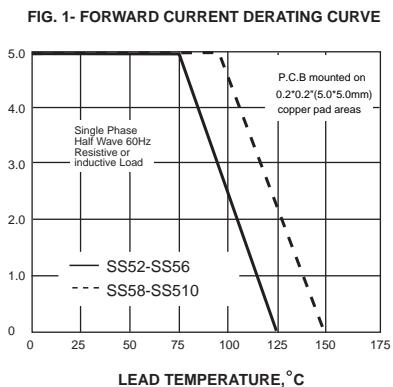
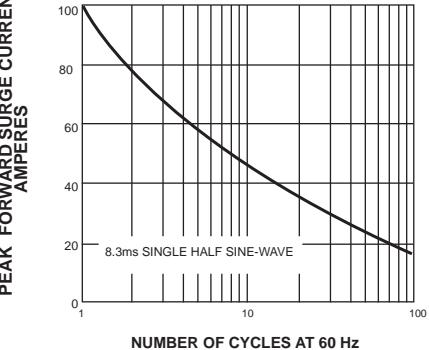
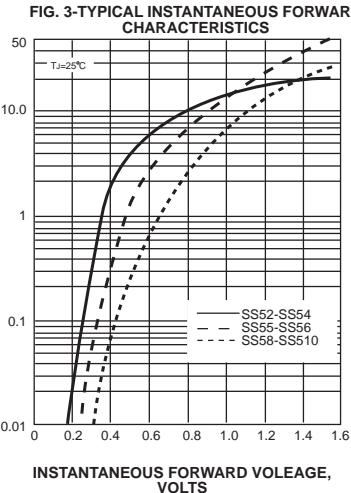


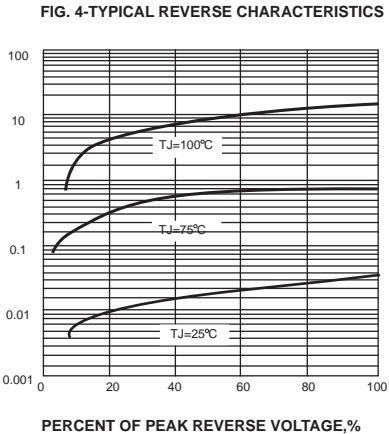
FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



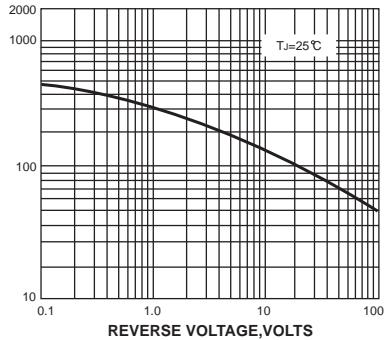
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,
°C/W

