

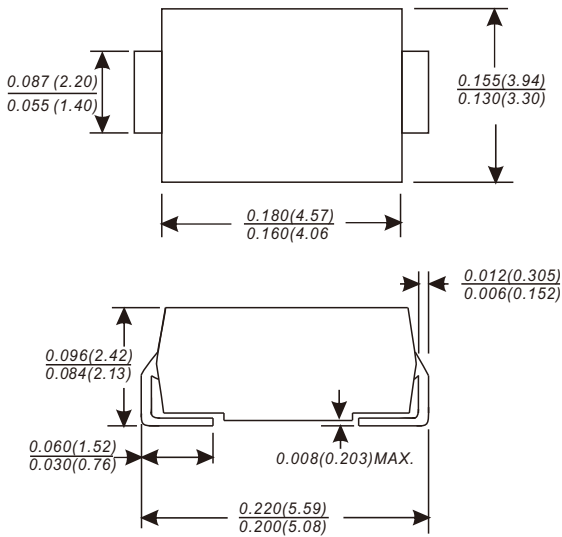


SS52 THRU SS520

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 5.0 Ampere

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: Plated axial 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	SS515	SS520	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	VOLTS
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum average forward rectified current at T _L (see fig.1)	I <sub(av)< sub=""></sub(av)<>	5.0									Amps
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	0.45	0.55	0.70			0.85	0.95		Volts	
Maximum DC reverse current T _A =25 °C at rated DC blocking voltage T _A =100 °C	I _R	0.5						0.2		mA	
		40.0			10.0						
Typical junction capacitance (NOTE 1)	C _J	500			400				pF		
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0									°C/W
Operating junction temperature range	T _J	-55 to +125					-55 to +150				°C
Storage temperature range	T _{STG}	-55 to +150									°C

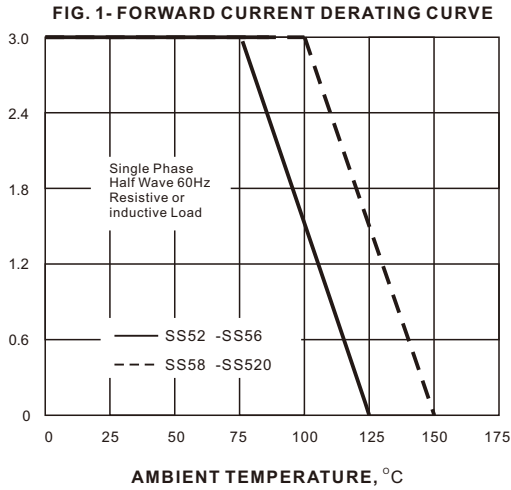
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

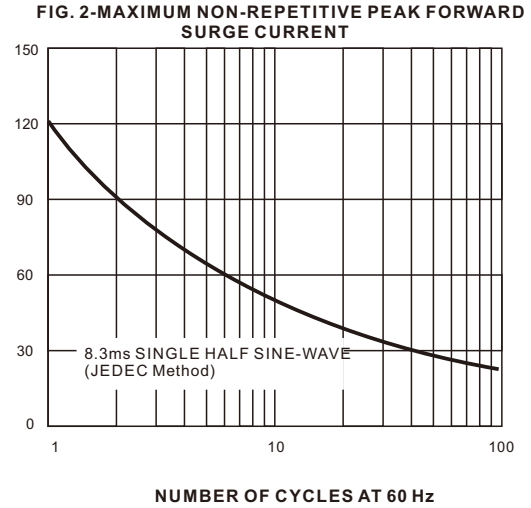


RATINGS AND CHARACTERISTIC CURVES SS32 THRU SS320

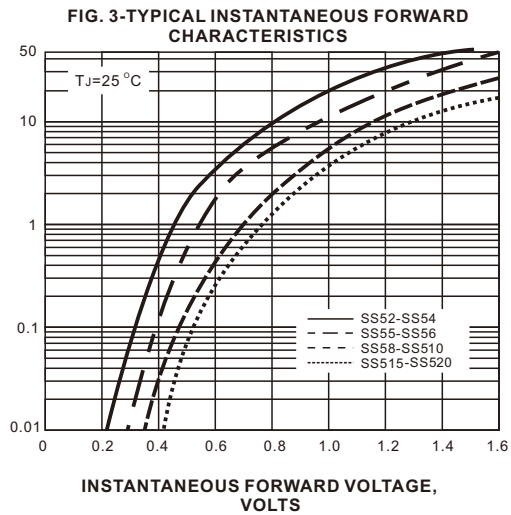
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



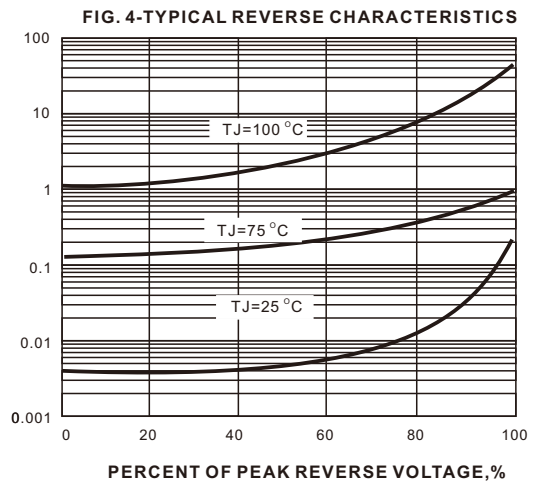
PEAK FORWARD SURGE CURRENT, AMPERES



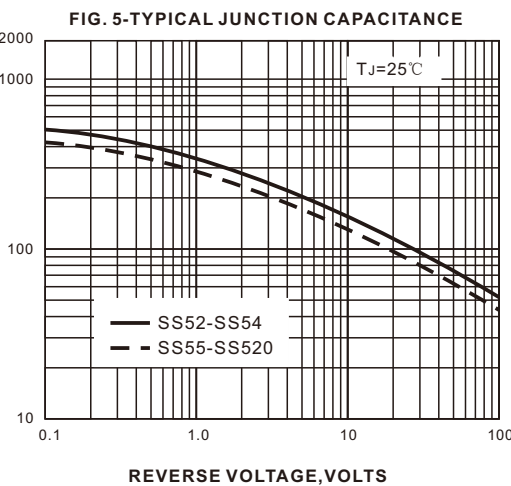
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, mA



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

