

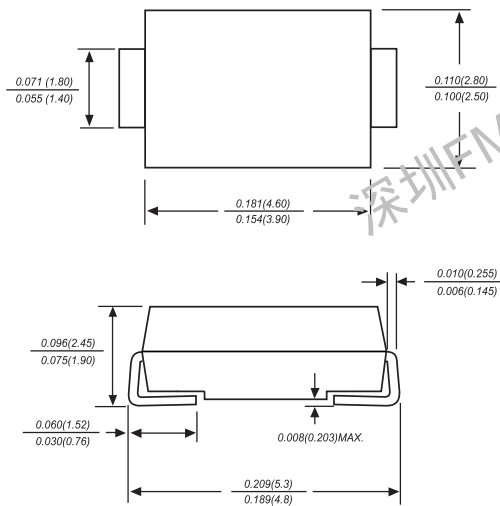
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Formosa MS

SS52 THRU SS520

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

SMA/DO-214AC



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: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC 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	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)	$I_{(AV)}$	5.0									Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0									Amps	
Maximum instantaneous forward voltage at 5.0A	V_F	0.45	0.55	0.70			0.85		0.90		Volts	
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	0.5					0.1					mA
Typical junction capacitance (NOTE 1)	C_J	800					500					pF
Typical thermal resistance (NOTE 2)	R_{qJA}	55.0									°C/W	
Operating junction temperature range	T_J	-65 to +125				-65 to +150						°C
Storage temperature range	T_{STG}	-65 to +150									°C	

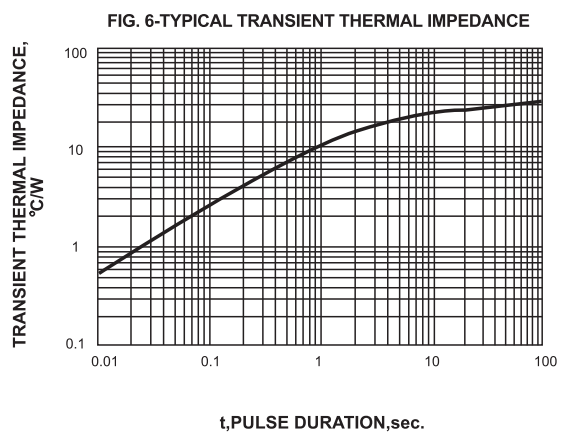
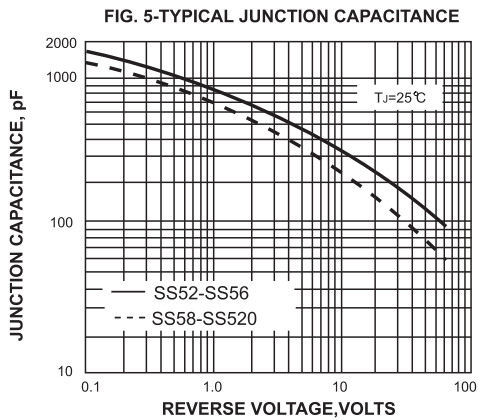
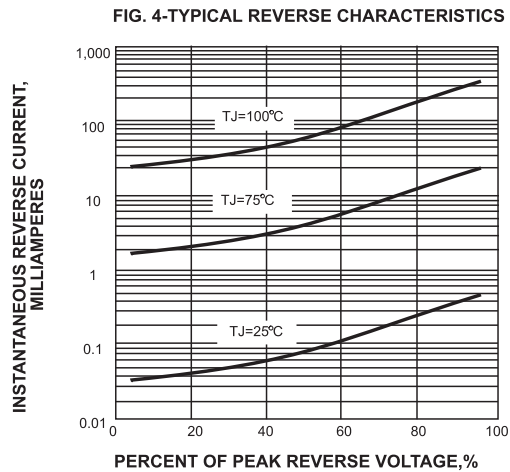
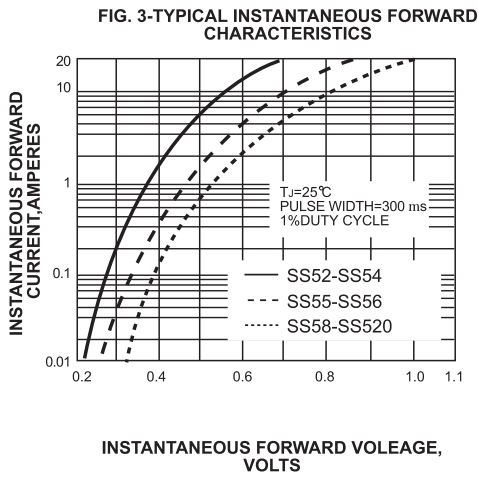
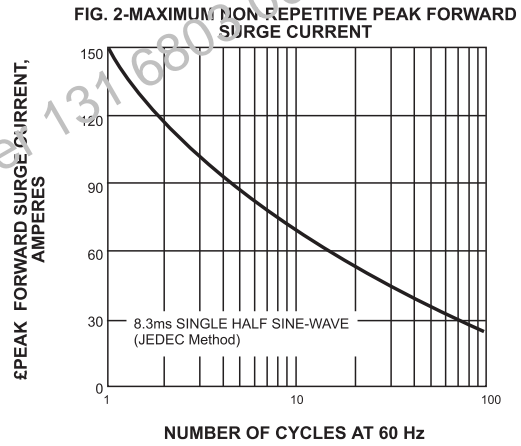
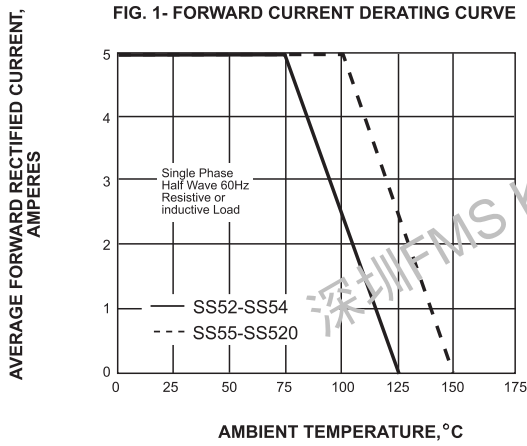
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



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RATINGS AND CHARACTERISTIC CURVES SS52 THRU SS520

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