



SS52 thru SS520

SCHOTTKY BARRIER RECTIFIER
Reverse Voltage - 20 to 200 Volts
Forward Current - 5.0Amperes

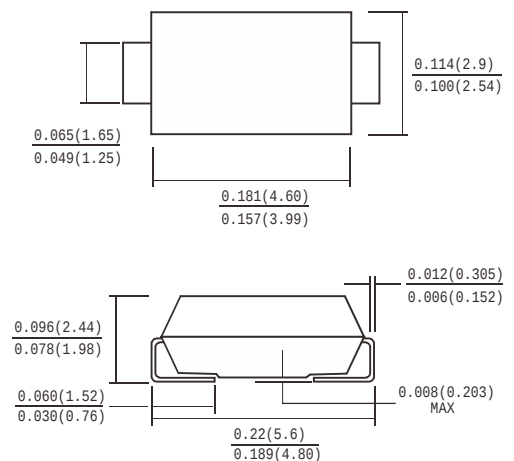
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- For surface mount applications
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Low profile package
- built-in strain relief ,ideal for automated placement
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: JEDEC SMA(DO-214AC) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.003ounce,0.093 gram

SMA(DO-214AC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		Symbols	SS52	SS53	SS54	SS56	SS510	SS515	SS520	Units
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	60	100	150	200	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	42	70	100	140	Volts
Maximum DC blocking voltage		V _{DC}	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length (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 3.0 A(Note 1)		V _F	0.55			0.65	0.80	0.85	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	I _R	0.05							mA
	T _A =100°C		10			5				
Typical junction capacitance(Note 3)		C _J				160				pF
Typical thermal resistance (Note 2)		R _{θJA} R _{θJL}	55.0 17.0							°C/W
Operating junction temperature range		T _J	-65 to+125			-65 to+150				°C
Storage temperature range		T _{STG}	-65 to+150							°C

- Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle
2. P.C.B. mounted 0.55 X 0.55"(14 X 14mm)copper pad areas
3. Measured at 1MHz and reverse voltage of 4.0volts

Rating and Characteristic Curves (TA = 25°C Unless otherwise noted)

SS52 thru SS520

FIG.1-FORWARD CURRENT DERATING CURVE

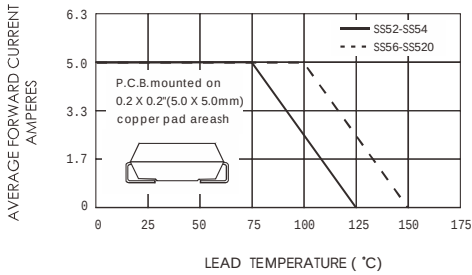


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

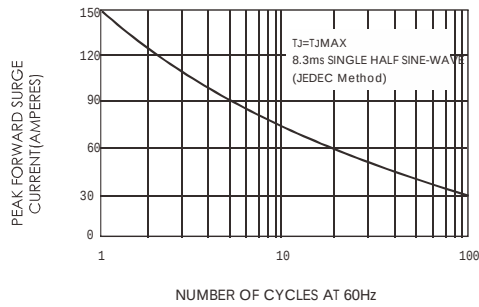


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

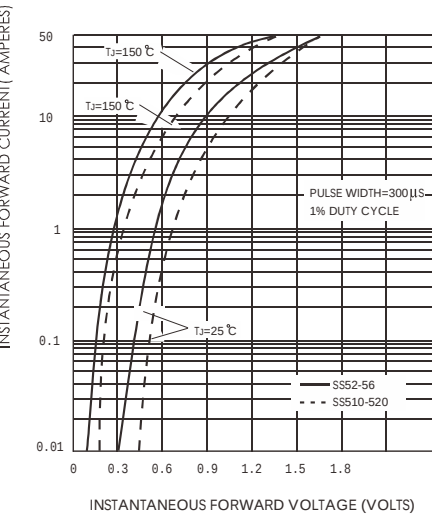


FIG.4-TYPICAL REVERSE CHARACTERISTICS

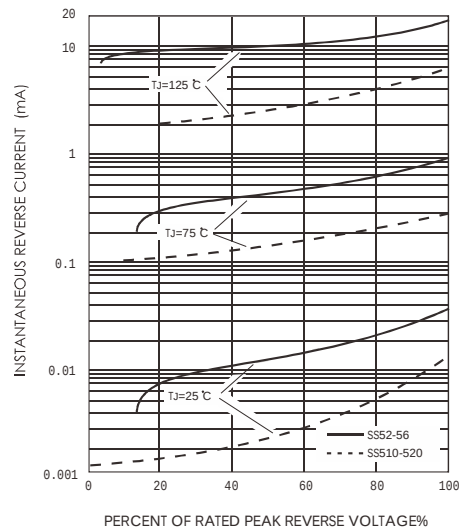


FIG 5-TYPICAL JUNCTION CAPACITANCE

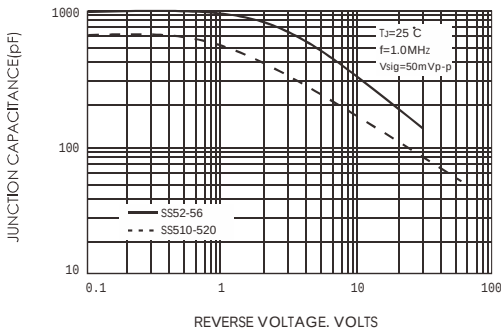


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

