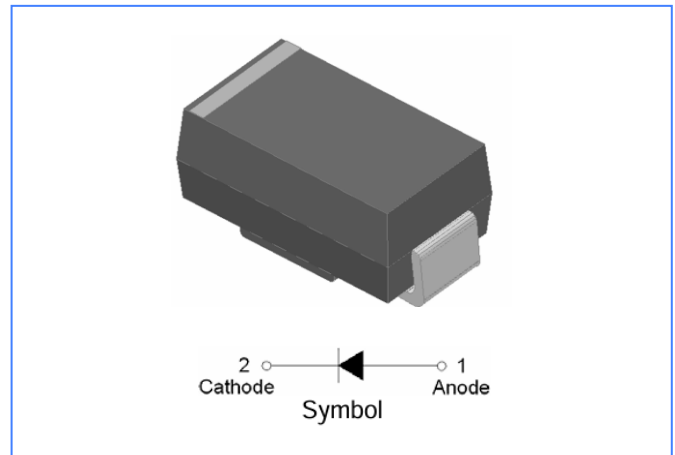


SS52-SS520 SMA

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC



Mechanical Data

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end

Major Ratings and characteristics

$I_{F(AV)}$	5.0A
V_{RRM}	20V to 200V
I_{FSM}	100A
V_F	0.5V, 0.55V, 0.7V, 0.85V, 0.90V
T_{jmax}	150°C

Maximum Ratings and Thermal Characteristics (TA=25°C unless otherwise noted)

Items	SYMBOL S	SS52	SS53	SS54	SS55	SS56	SS58	SS510	SS515	SS520	UNITS
Maximum Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	105	140	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5									A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100									A
Voltage rate of change (rated VR)	dv/dt	10000									V/μs
Thermal resistance from junction to lead ⁽¹⁾	$R_{θJL}$	25									°C/W
Operating junction and storage temperature range	T_j, T_{STG}	-55 to +150									°C

Note: 1. Mounted on P.C.B. with 0.2x 0.2" (5.0 x 5.0mm) copper pad areas.

Electrical Characteristics (TA=25°C unless otherwise noted)

Items	Test conditions		symbol	SS52	SS53-54	SS55-56	SS58-510	SS515-520	unit
Instantaneous forward voltage	I _F =5A ⁽²⁾		V _F	0.50	0.55	0.70	0.85	0.95	V
reverse current	V _R =V _{DC}	T _J =25°C	I _R	0.5					mA
		T _J =100°C		10					

Note 2: Pulse test:300μs pulse width,1% duty cycle.

RATING AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

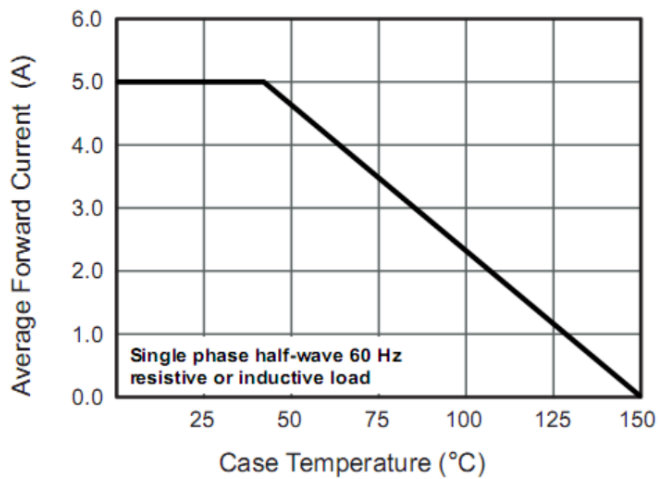


Fig.2 Maximum Non-Repetitive Peak Forward surge current

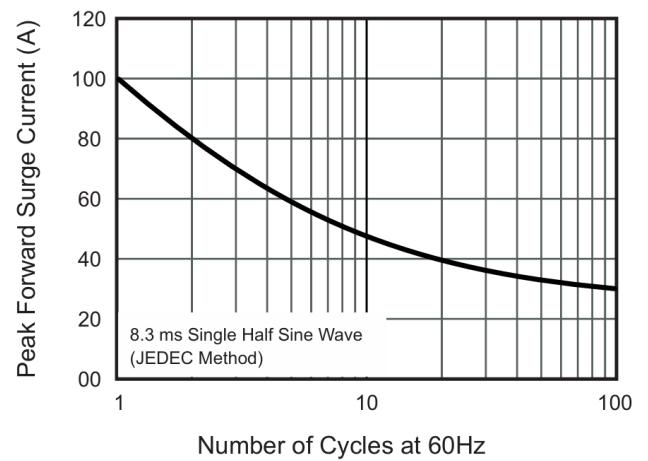


Fig.3 Typical Instantaneous Forward Characteristics

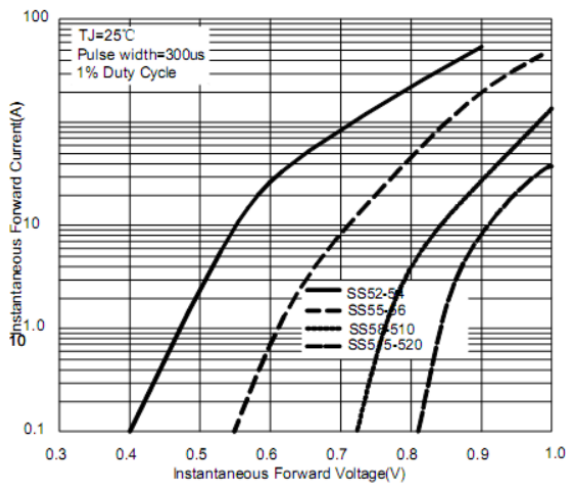
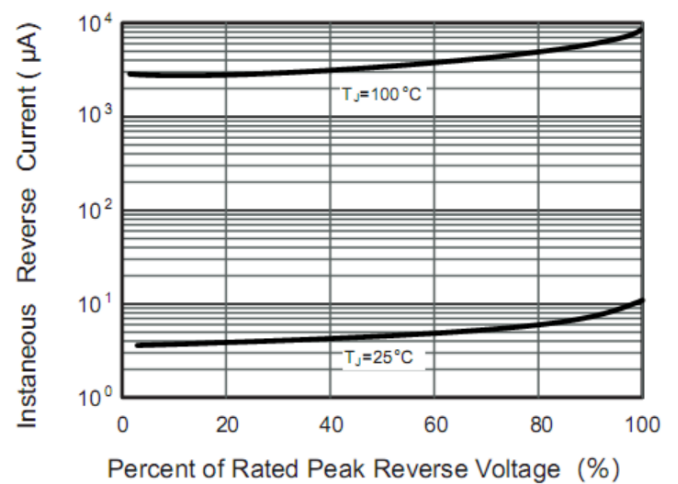
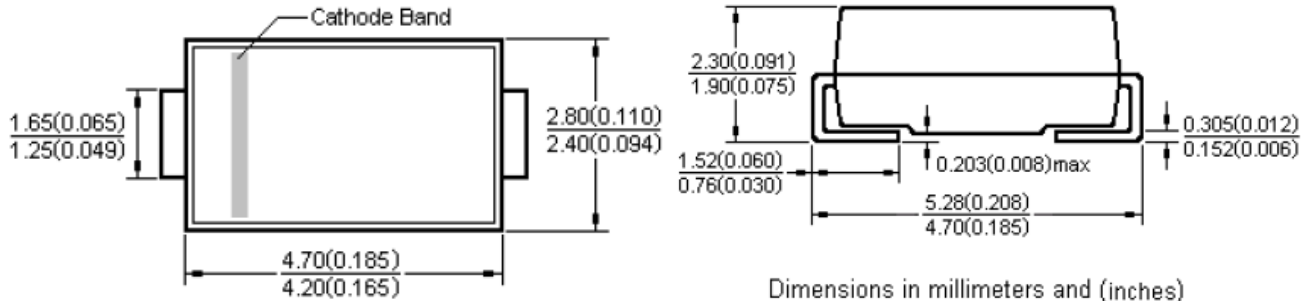


Fig.4 Typical Reverse Leakage Characteristics



PACKAGE OUTLINE DIMENSIONS

SMA (DO – 214AC)



Dimensions in millimeters and (inches)

SMA(DO-214AC)

Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.