

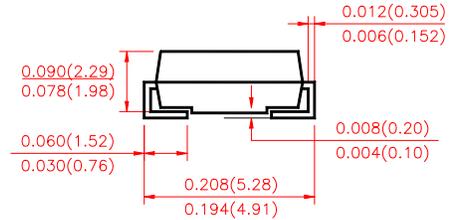
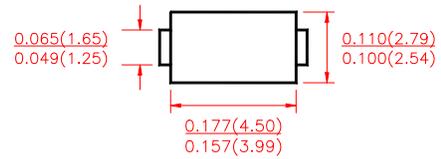


SS5100 THRU SS5200

VOLTAGE RANGE
100 to 200 Volts
CURRENT
5.0 Ampere

Features

- Low profile surface mount package
- Built in strain relief
- High switching speed
- Low voltage drop, high efficiency
- For use in low voltage high frequency inverters, Free willing ,and polarity protection applications
- Guardring for over voltage protection

DO-214AC(SMA)

Dimensions in inches and (millimeters)

Mechanical Data

- Case: Transfer molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead :Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram

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 derate current by 20%

TYPE NUMBER	SYMBOLS	SS5100	SS5150	SS5200	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	100	150	200	Volts
Maximum Average Forward Rectified Current at T_L see figure 1 $T_L = 105^\circ C$	$I_{(AV)}$	5			Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120			Amps
Maximum Instantaneous Forward Voltage @ 5.0A(Note1)	V_F	0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ C$	0.15			mA
	$T_A = 100^\circ C$	1.5			
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55			$^\circ C/W$
	$R_{\theta JL}$	12			
Operating Junction Temperature	T_J	150			$^\circ C$
Storage Temperature Range	T_{STG}	(-55 to +150)			$^\circ C$

Notes:

1. Pulse test:300μs pulse width,1% duty cycle
2. PCB mounted with 0.2"×0.2"(5.0cm×5.0cm)copper pads



SS5100 THRU SS5200

VOLTAGE RANGE

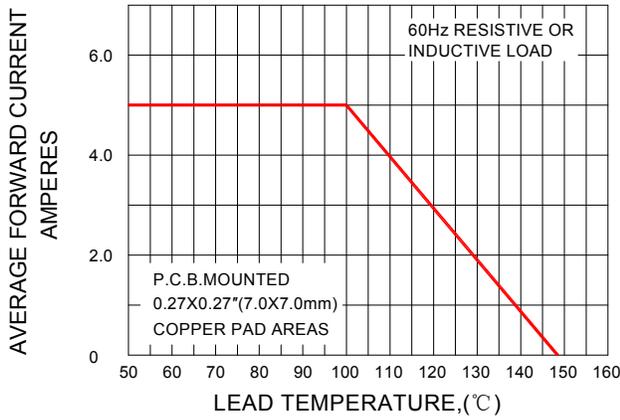
100 to 200 Volts

CURRENT

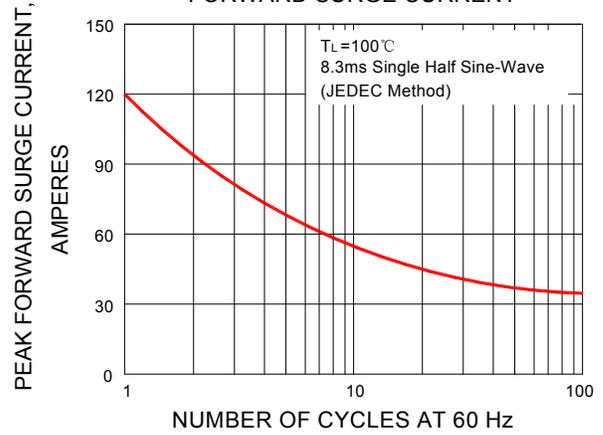
5.0 Ampere

Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

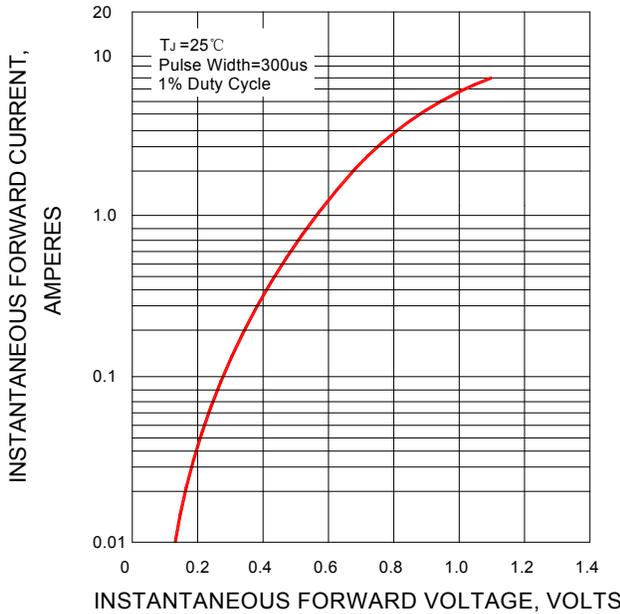
F1G.1-FORWARD CURRENT DERATING CURVE



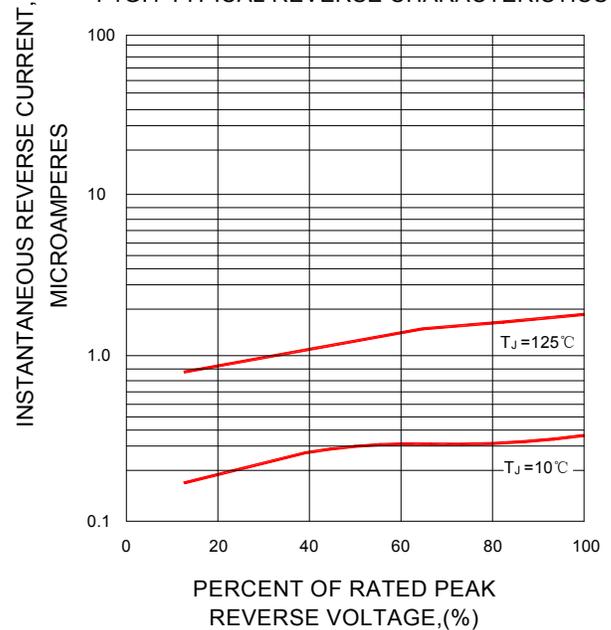
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE

