



# Taiwan Goodark Technology Co.,Ltd

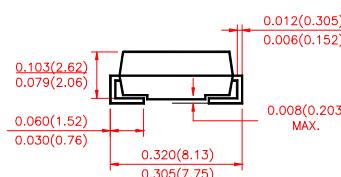
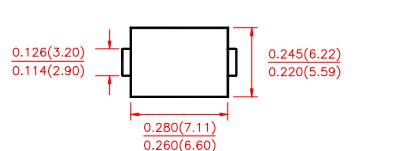
## SS5150 THRU SS5200

### 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 wheeling ,and polarity protection applications
- Guardring for over voltage protection

### 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: 0.007 ounce, 0.25 gram



Dimensions in inches and (millimeters)

### 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%.

	SYMBOLS	SS5150	SS5200	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	150	200	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	105	140	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	150	200	Volts
Maximum Average Forward Rectified Current at T <sub>L</sub> see figure 1 T <sub>L</sub> =105°C	I <sub>(AV)</sub>	5		Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	120		Amps
Maximum Instantaneous Forward Voltage @ 3.0A(Note1)	V <sub>F</sub>	0.85		Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	T <sub>A</sub> = 25°C	I <sub>R</sub>	0.3	mA
	T <sub>A</sub> = 100°C		10	
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	55		°C/W
	R <sub>θJL</sub>	12		
Operating Junction Temperature	T <sub>J</sub>	150		°C
Storage Temperature Range	T <sub>STG</sub>	(-55 to +150)		°C

#### Notes:

1. Pulse test:300 μ s pulse width,1% duty cycle
2. P.C.B.with 0.3×0.3" (8.0 × 8.0mm) copper pad areas.



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

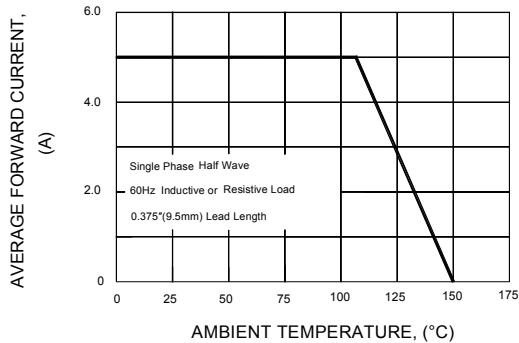


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

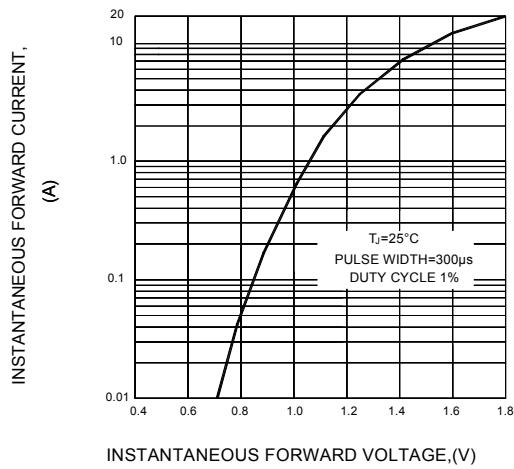


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

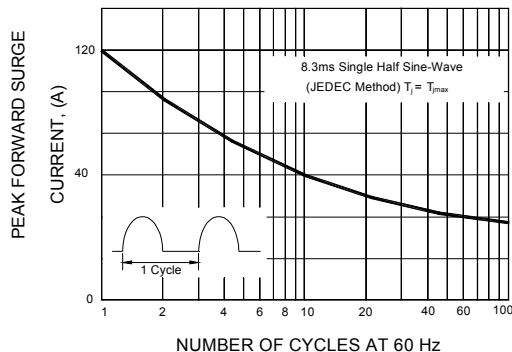


FIG.4-TYPICAL REVERSE CHARACTERISTICS

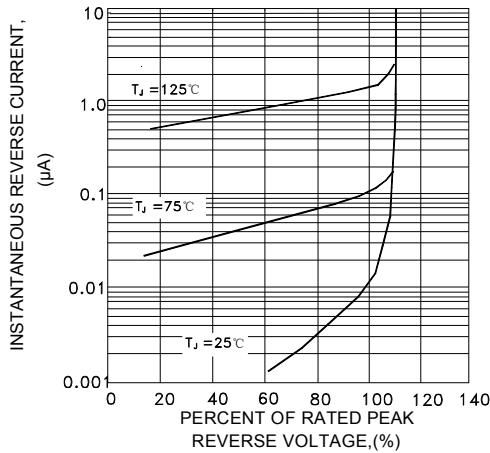


FIG.5-TYPICAL JUNCTION CAPACITANCE

