



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**S05AFL
THRU
S05MFL**

TECHNICAL SPECIFICATIONS OF GENERAL PRUPOSE SILICON RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts **CURRENT - 0.5 Ampere**

FEATURES

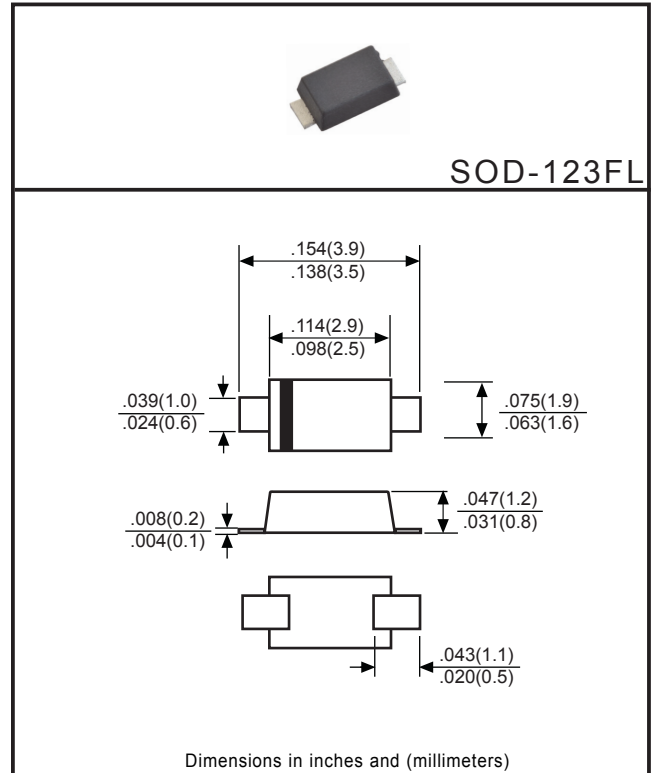
- * Ideal for surface mounted applications
- * Low leakage current
- * Low profile space
- * Low forward voltage drop
- * High forward surge capability
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94-V0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.017 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%.



	SYMBOL	S05 AFL	S05 BFL	S05 DFL	S05 GFL	S05 JFL	S05 KFL	S05 MFL	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 55°C	Io	0.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	20							Amps
Maximum Instantaneous Forward Voltage at 0.5 A DC	VF	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TJ = 25°C	5.0							µAmps
	@TJ = 125°C	100							
Typical Thermal Resistance (Note 1)	RθJA	150							°C/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150							°C

Note 1 :Typical thermal resistnce from junction to ambient.

RATING AND CHARACTERISTIC CURVES (S05AFL THRU S05MFL)

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

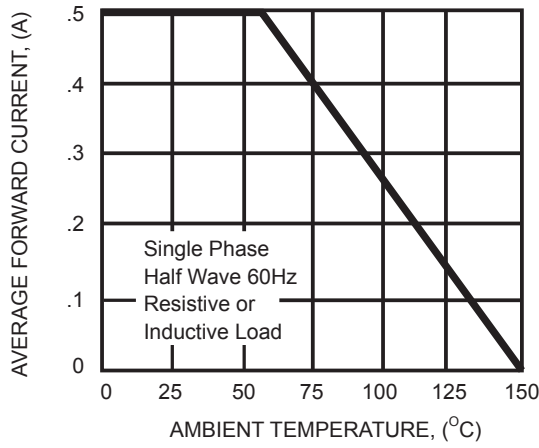


FIG. 2
MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

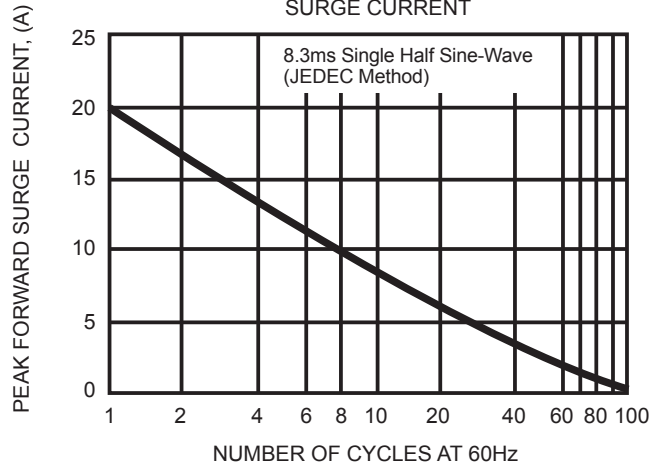


FIG. 3
TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

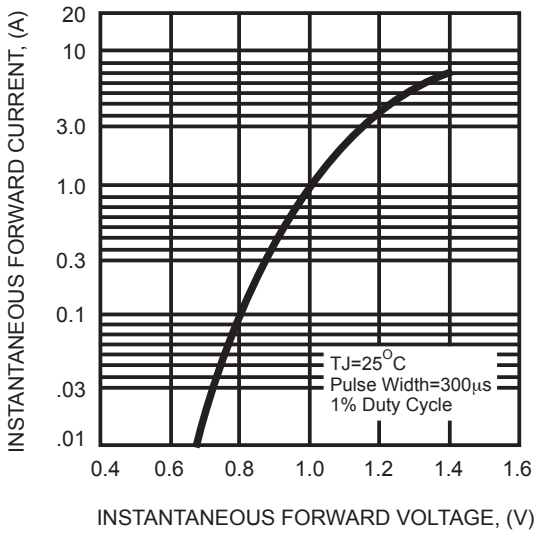
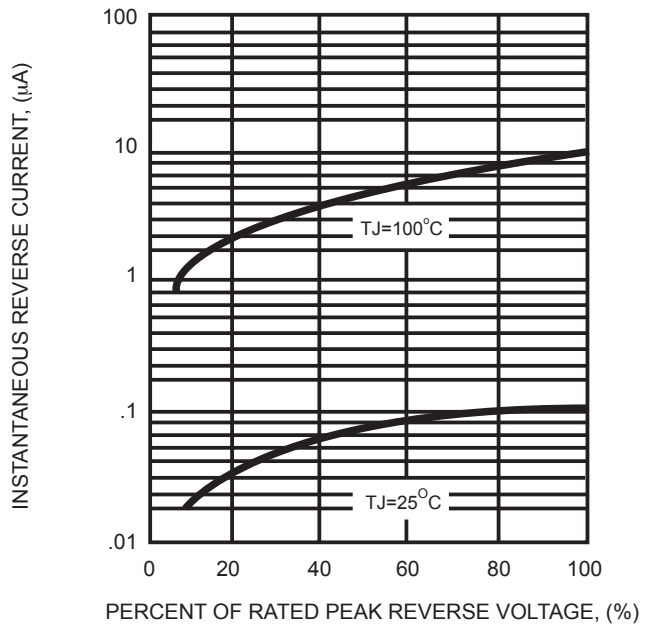


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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