



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**SF05AFL
THRU
SF05JFL**

TECHNICAL SPECIFICATIONS OF SUPER FAST SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE - 50 to 600 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

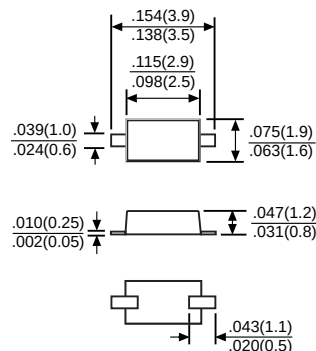
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- *Terminals: Solder plated, solderable per
MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.017 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



SOD-123FL



Dimensions in inches and (millimeters)

		SYMBOL	SF05AFL	SF05BFL	SF05CFL	SF05DFL	SF05EFL	SF05GFL	SF05JFL	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	150	200	300	400	600	Volts
Maximum RMS Voltage		V _{RMS}	35	70	105	140	210	280	420	Volts
Maximum DC Blocking Voltage		V _{DC}	50	100	150	200	300	400	600	Volts
Maximum Average Forward Rectified Current		I _O	0.5							Amps
Peak Forward Surge Current I _{FM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	15							Amps
Maximum Forward Voltage at 0.5A DC		V _F	0.95				1.25			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T _A = 25°C	I _R	5.0							uAmps
	@ T _A = 125°C		100							
Maximum reverse recovery time at I _F = 0.5A , I _R = 1.0A , I _{rr} = 0.25A		t _{rr}	35							nS
Typical thermal resistance		R _{θJA}	150							°C/W
Operating and Storage Temperature Range		T _J , T _{STG}	-55 to + 150							°C

NOTES :1. Mounted on FR-4 P.C.B. with 0.9X1.5 mm copper pads areas.

RATING AND CHARACTERISTIC CURVES (SF05AFL THRU SF05MFL)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

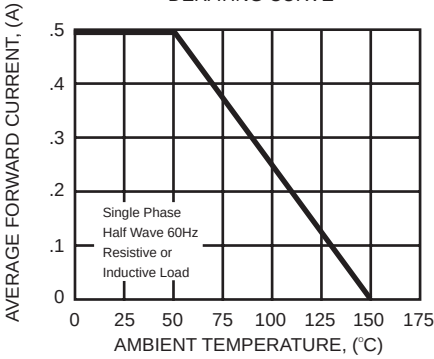


FIG. 2 - MAXIMUM NON-REPETITIVE FOREARD SURGE CURRENT

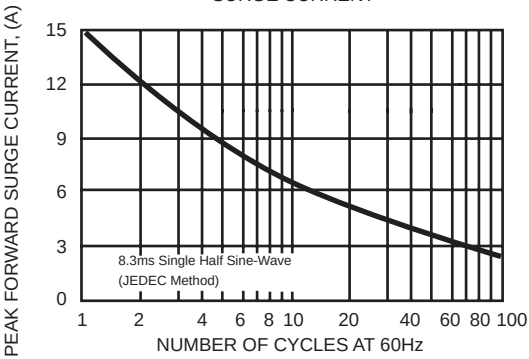


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

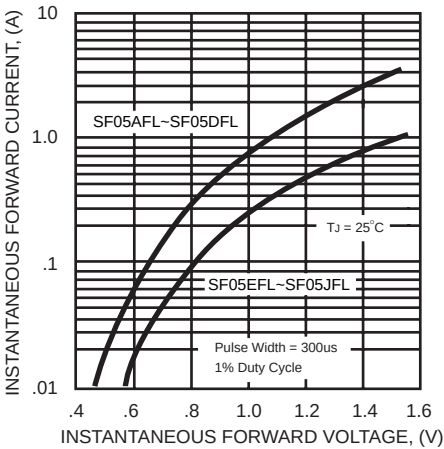


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

