

SAMYANG ELECTRONICS

SILICON BRIDGE RECTIFIERS

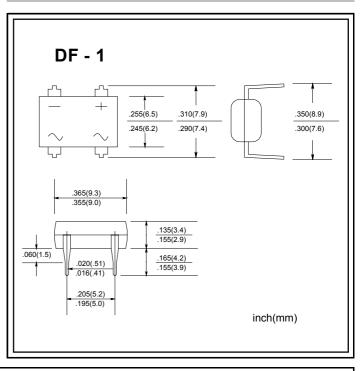
VOLTAGE RANGE: 50 --- 1000 V

CURRENT: 1.0 A

FEATURES

- ♦ Rating to 1000V PRV
- ♦ Surge overload rating to 30 Amperes peak
- ♦ Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product

- Plastic material has UL flammability classification 94V-O
- ♦ Polarity symbols molded on body
- ♦ Weight: 0.016 ounces,0.45 grams



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 by 20%.

		DF005	DF 10	DF02	DF0 4	DF06	DF0 8	DF1 0	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	٧
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forw ard Output current @T _A =25℃	I _{F(AV)}	1.0						А	
Peak forw ard surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	30.0							А
Maximum instantaneous forw ard voltage at 1.0 A	V _F	1.1						V	
Maximum reverse current $@T_A = 25\%$ at rated DC blocking voltage $@T_A = 100\%$	I _R	10.0 1.0							A m A
Operating junction temperature range	TJ	- 55 + 150							$^{\circ}$
Storage temperature range	T _{STG}	- 55 + 150							$^{\circ}$

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FIG.1 - PEAK FORWARD SURGE CURRENT

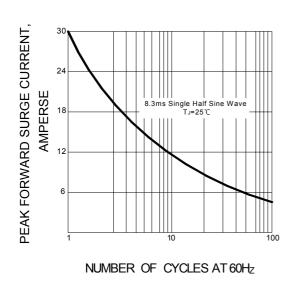
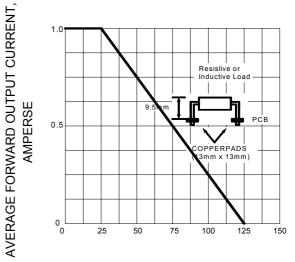


FIG.2 - FORWARD DERATING CURVE



AMBIENT TEMPERATURE, °C

FIG.3 - TYPICAL FORWARD CHARACTERISTIC

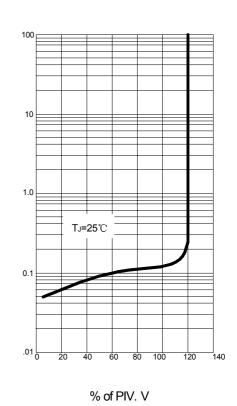
INSTANTANEOUS FORWARD CURRENT, AMPERSE 0.1 TJ=125°C Pulse Width =300uS

10

0.1 - 0.4

0.6

FIG.4 - TYPICAL REVERSE CHARACTERISTIC



INSTANTANEOUS REVERSE CURRENT, MICRO AMPERSE

INSTANTANEOUS FORWARD VOLTAGE, VOLTS

0.8

1.0

1.2

1.4

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