



1. DATA SHEET

FL400 thru FL408

IN-LINE MINIATURE SINGLE PHASE SILICON BRIDGE RECTIFIER

VOLTAGE 50 to 800 Volts **CURRENT** 4.0 Amperes

Recongized File # E111753

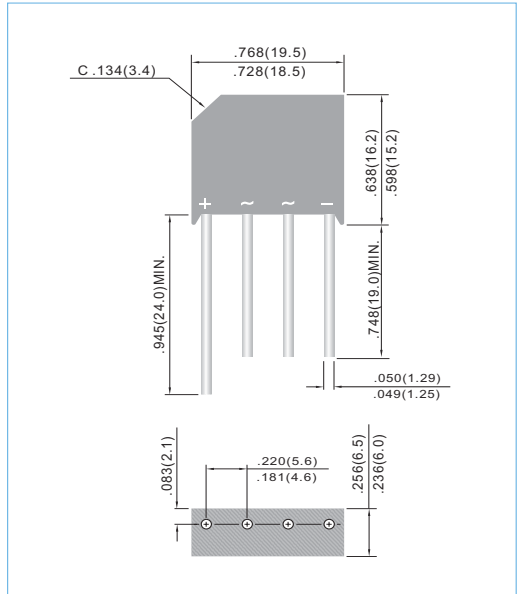
FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 200 Amperes peak
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Terminals: Leads solderable per MIL-STD-750, Method 2026
 Mounting position: Any
 Weight: 0.2 ounce, 5.6 grams

FL Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
 For Capacitive load derate current by 20%.

PARAMETER	SYMBOL	FL400	FL401	FL402	FL404	FL406	FL408	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	V
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current For Resistive Load at TA=50°C	I _{AV}	4.0						A
Peak One Cycle Surge Overload Current	I _{FSM}	200						A
Maximum Forward Voltage per Bridge Element at 4.0A	V _F	1.1						V
Maximum Reverse Leakage Current at Rated @ TA=25°C Dc Blocking Voltage @ TA=100°C	I _R	10 1000						uA
I ² t Rating for fusing (t<8.35ms)	I ² t	93						A ² t
Typical Thermal Resistance per leg (Note 1) (Note 2)	R _{θJA} R _{θJL}	19 2.4						°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150						°C

NOTES:

1. Thermal resistance from junction to ambient with units mounted on 0.3 x 0.3 x 0.11" thick(7.5 x 7.5 x 0.3cm) AL Plate.
2. Thermal resistance from junction to lead with units mounted on P.C.B with 0.375"(9.5mm) lead length and 0.5 x 0.5" (12 x 12 mm) copper pads.



RATING AND CHARACTERISTIC CURVES

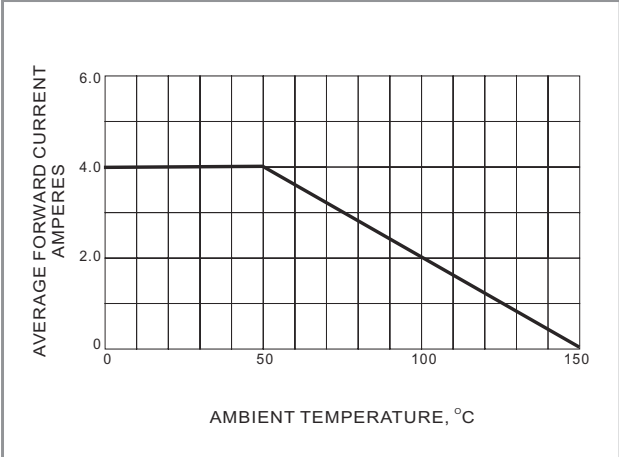


FIG. 1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

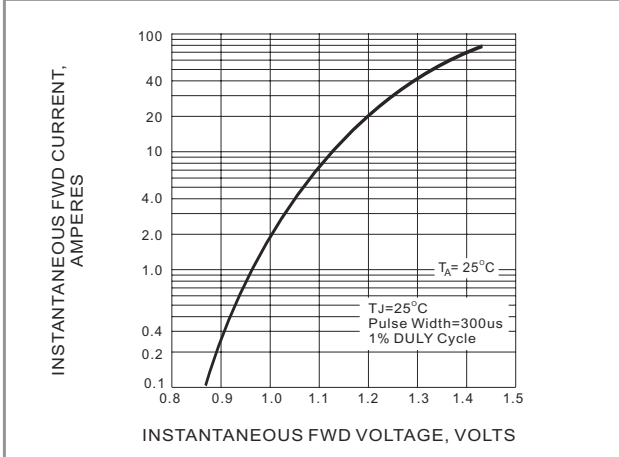


FIG. 2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

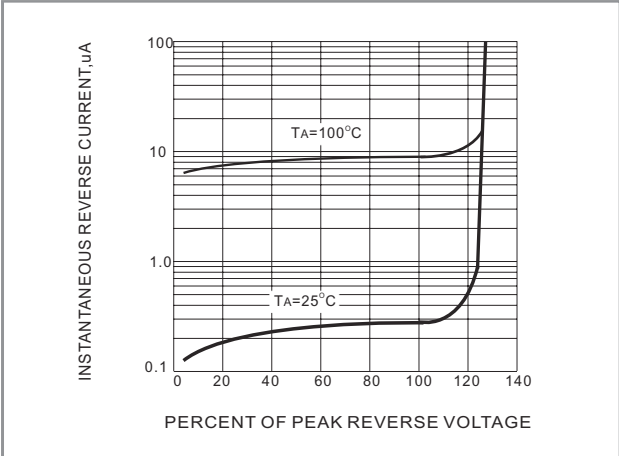


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

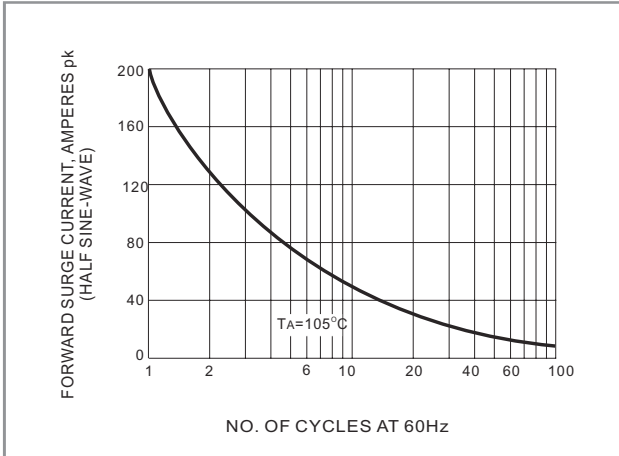


FIG. 4 MAX NON-REPETITIVE SURGE CURRENT



2. MARKING

