FLEMING

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# TB05S THRU TB10S

## SINGLE PHASE 1.0 AMP SURF ACE MOUNT BRIDGE RECTIFIERS

## VOLTAGE RANGE

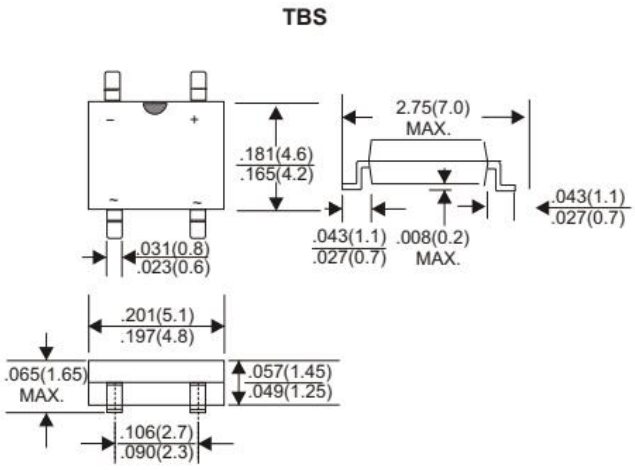
50 to 1000 Volts

## CURRENT

1.0 Ampere

## FEATURES

* Ideal for printed circuit board
* Reliable low cost construction utilizing molded plastic technique
* High surge current capability
* Polarity: Symbol molded on body
* Mounting position: Any
* Weight: 0.12 grams




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| TYPE NUMBER | TB05S | TB1S | TB2S | TB4S | TB6S | TB8S | TB10S | UNITS |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current at Ta=40 C(Note 1) | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 3 0 | | | | | | | A |
| Maximum Forward Voltage Drop per Bridge Element at 0.4A D.C. | 1.0 | | | | | | | V |
| Maximum DC Reverse Current Ta=25 C | 5.0 | | | | | | | A |
| at Rated DC Blocking Voltage Ta=125 C | 500 | | | | | | | AC/ |
| Typical Thermal Resistance R JA (Note 2) | 75 | | | | | | | W |
| Operating Temperature Range, TJ | -55 —+150 | | | | | | | C |
| Storage Temperature Range, TSTG | 55 —+150 | | | | | | | C |

NOTES: 1. Mounted on P.C. Board.
2. Thermal Resistance Junction to Ambient.

# RATING AND CHARACTERISTIC CURVES (TB05S THRU TB10S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

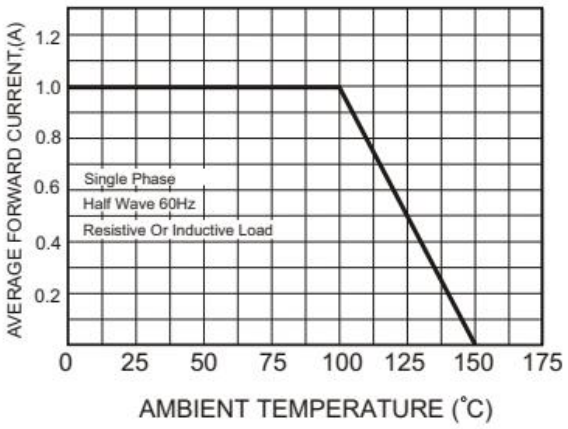



FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

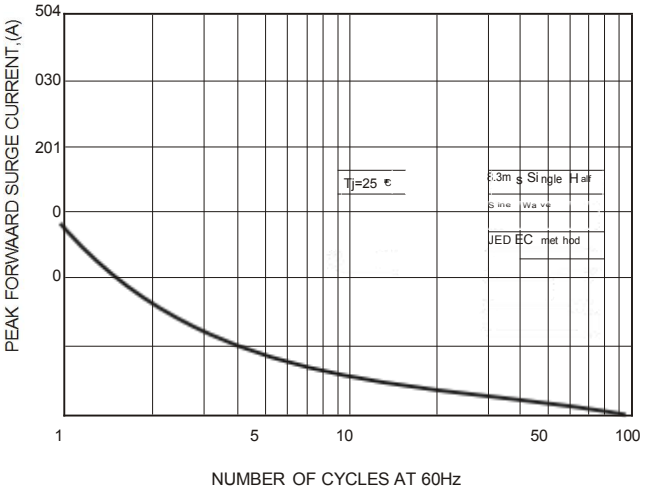



FIG.3-TYPICAL FORWARD CHARACTERISTICS

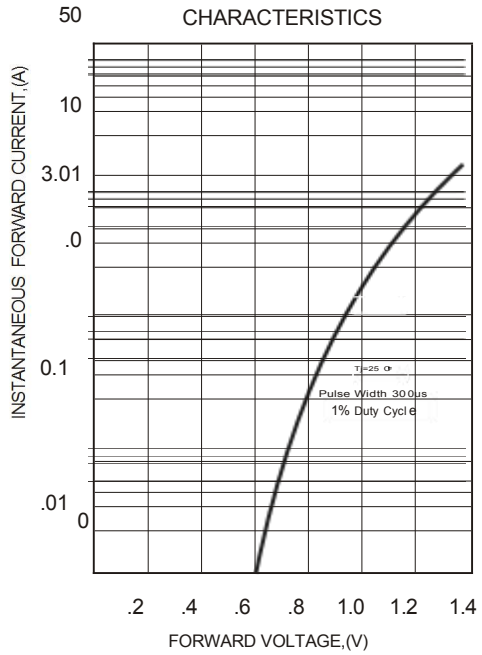
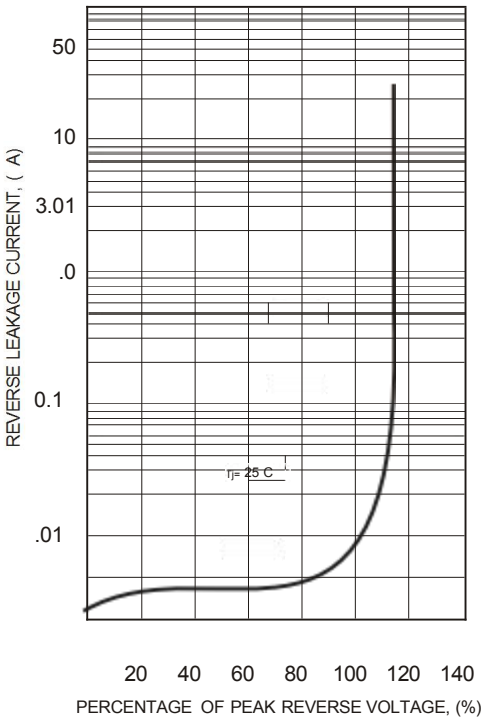
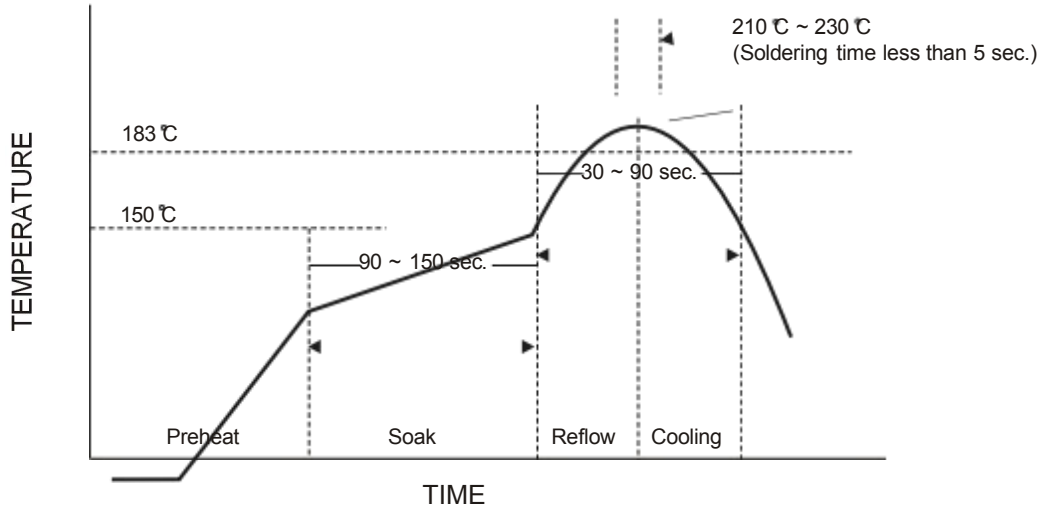



FIG.4-TYPICAL REVERSE CHARACTERISTICS

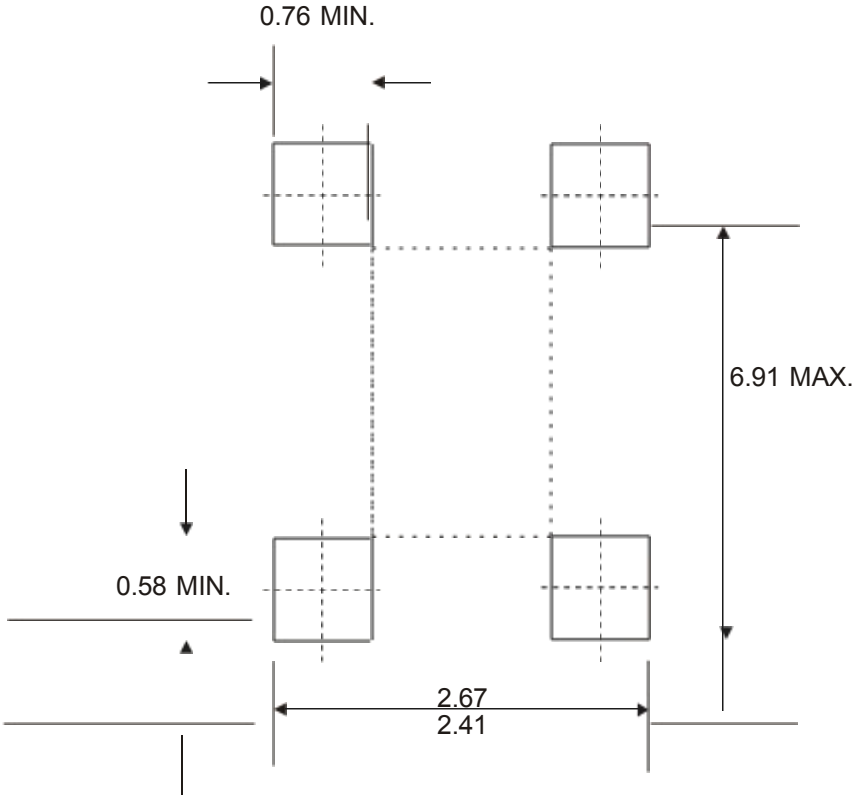


RECOMMENDED INFRARED REFLOW SOLDERING PROFILE:




RECOMMENDED MANUAL SOLDERING CONDITION: 350 C / LESS THAN 3 SECONDS.

RECOMMENDED MOUNTING PAD LAYOUT:




DIMENSIONS IN MILLIMETER