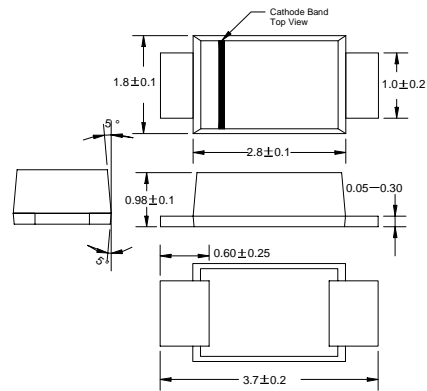


FEATURES

- For surface mounted applications
- Low profile package
- Low incremental surge resistance,excellent clamping capability
- 200W peak pulse power capability with a 10/1000μs wave from,repitition rate (duty cycle):0.01%
- High temperature soldering guaranteed: 260 /10 seconds, at terminals



SOD - 123FL

MECHANICAL DATA

- Case: JEDEC SOD-123FL, molded plastic
- Polarity: Color band denotes positive end (cathode) except for bidirectional
- Marking code: see TABLE 1
- Weight:0.006 ounces, 0.02 gram
- Mounting position: Any

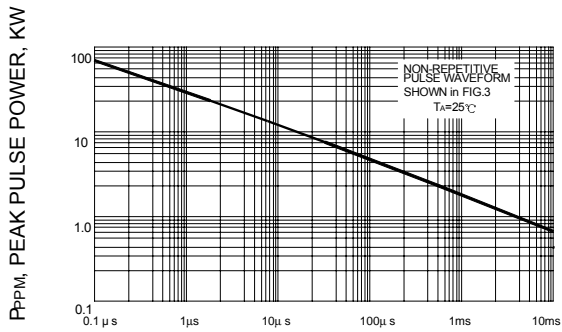
ABSOLUTE MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified

| | SYMBOL | VALUE | UNITS |
|--|------------------|--------------|-------|
| Non-repetitive peak pulse power dissipation with a 10/1000μs waveform (NOTE 1) | P _{PPM} | 200 | W |
| Peak pulse current 10/1000 μs wavefrom (NOTE 1) | I _{PPM} | See Table1 | A |
| Forward voltage @ I _F =12A | V _F | 3.5 | V |
| Thermal resistance junction to ambient | R _{θJA} | 180 | K/W |
| Operating temperature junction range | T _J | - 55 to +150 | |
| Storage temperature range | T _{STG} | - 55 to +150 | |

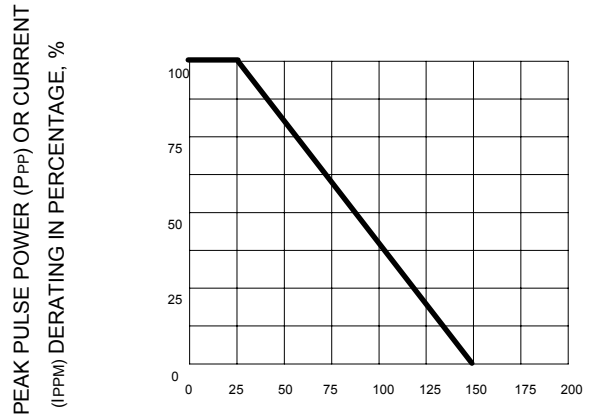
| Type | Marking Code UNI | $V_{(BR)}^{1)}$ | I_T | V_{WM} | $I_D@V_{WM}$ | $I_{PPM}^{2)}$ | $V_C@I_{PPM}$ |
|---------|---------------------|-----------------|-------|----------|--------------|----------------|---------------|
| | | V Min | m A | V | μ A | A | V |
| SMF5V0A | AE | 6.40 | 10 | 5.0 | 400 | 21.7 | 9.2 |
| SMF6V0A | AG | 6.67 | 10 | 6.0 | 400 | 19.4 | 10.3 |
| SMF6V5A | AK | 7.22 | 10 | 6.5 | 250 | 17.9 | 11.2 |
| SMF7V0A | AM | 7.78 | 10 | 7.0 | 100 | 16.7 | 12.0 |
| SMF7V5A | AP | 8.33 | 1.0 | 7.5 | 50 | 15.5 | 12.9 |
| SMF8V0A | AR | 8.89 | 1.0 | 8.0 | 25 | 14.7 | 13.6 |
| SMF8V5A | AT | 9.44 | 1.0 | 8.5 | 10 | 13.9 | 14.4 |
| SMF9V0A | AV | 10.0 | 1.0 | 9.0 | 5.0 | 13.5 | 15.4 |
| SMF10A | AX | 11.1 | 1.0 | 10 | 2.5 | 11.8 | 17.0 |
| SMF11A | AZ | 12.2 | 1.0 | 11 | 2.5 | 11.0 | 18.2 |
| SMF12A | BE | 13.3 | 1.0 | 12 | 2.5 | 10.1 | 19.9 |
| SMF13A | BG | 14.4 | 1.0 | 13 | 1.0 | 9.3 | 21.5 |
| SMF14A | BK | 15.6 | 1.0 | 14 | 1.0 | 8.6 | 23.2 |
| SMF15A | BM | 16.7 | 1.0 | 15 | 1.0 | 8.2 | 24.4 |
| SMF16A | BP | 17.8 | 1.0 | 16 | 1.0 | 7.7 | 26.0 |
| SMF17A | BR | 18.9 | 1.0 | 17 | 1.0 | 7.2 | 27.6 |
| SMF18A | BT | 20.0 | 1.0 | 18 | 1.0 | 5.8 | 29.2 |
| SMF20A | BV | 22.2 | 1.0 | 20 | 1.0 | 6.2 | 32.4 |
| SMF22A | BX | 24.4 | 1.0 | 22 | 1.0 | 5.6 | 35.5 |
| SMF24A | BZ | 26.7 | 1.0 | 24 | 1.0 | 5.1 | 38.9 |
| SMF26A | CE | 28.9 | 1.0 | 26 | 1.0 | 4.8 | 42.1 |
| SMF28A | CG | 31.1 | 1.0 | 28 | 1.0 | 4.4 | 45.4 |
| SMF30A | CK | 33.3 | 1.0 | 30 | 1.0 | 4.1 | 48.4 |
| SMF33A | CM | 36.7 | 1.0 | 33 | 1.0 | 3.8 | 53.3 |
| SMF36A | CP | 40.0 | 1.0 | 36 | 1.0 | 3.4 | 58.1 |
| SMF40A | CR | 44.4 | 1.0 | 40 | 1.0 | 3.1 | 64.5 |
| SMF43A | CT | 47.8 | 1.0 | 43 | 1.0 | 2.9 | 69.4 |
| SMF45A | CV | 50.0 | 1.0 | 45 | 1.0 | 2.8 | 72.7 |
| SMF48A | CX | 53.3 | 1.0 | 48 | 1.0 | 2.6 | 77.4 |
| SMF51A | CZ | 56.7 | 1.0 | 51 | 1.0 | 2.4 | 82.4 |

FIG.1 – PEAK PULSE POWER RATING CURVE



td, PULSE WIDTH, SEC

FIG.2 -- PULSE DERATING CURVE



TA, AMBIENT TEMPERATURE.°C

FIG.3 -- PULSE WAVEFORM

