# SX32F SERIES

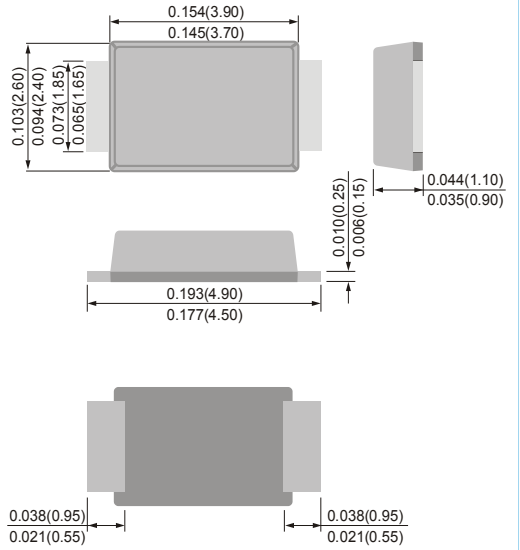
## SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 20-60 Volts **CURRENT** 3 Amperes

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

**SMAF** Unit : inch(mm)



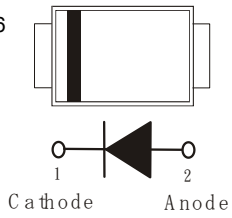

### MECHANICAL DATA

Case : SMAF, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.0011 ounces, 0.0328 grams




### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A$=25°C unless otherwise noted)

| PARAMETER | SYMBOL | SX32F | SX33F | SX34F | SX35F | SX36F | UNITS |
|---|---|---|---|---|---|---|---|
| Recurrent Peak Reverse Voltage | $V_{RRM}$ | 20 | 30 | 40 | 50 | 60 | V |
| RMS Voltage | $V_{RMS}$ | 14 | 21 | 28 | 35 | 42 | V |
| DC Blocking Voltage | $V_R$ | 20 | 30 | 40 | 50 | 60 | V |
| Average Forward Current | $I_{F(AV)}$ | 3.0 | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | $I_{FSM}$ | 80 | | | | | A |
| Forward Voltage at 3.0A | $V_F$ | 0.5 | | | 0.75 | | V |
| DC Reverse Current at Rated DC Blocking Voltage $T_J$=25°C | $I_R$ | 100 | | | | | μA |
| Typical Junction capacitance $V_R$=0V,1MHz | $C_J$ | 485 | | | 150 | | pF |
| Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2) | $R_{\theta JL}$ $R_{\theta JA}$ | 20 150 | | | | | °C / W |
| Operating Junction Temperature and Storage Temperature Range | $T_J$,$T_{STG}$ | -55 to +150 | | | | | °C |

**NOTES :**

1.Mounted on an FR4 PCB, single-sided copper, with 48cm$^2$copper pad area.

2.Mounted on an FR4 PCB, single-sided copper, mini pad.

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## RATING AND CHARACTERISTIC CURVES

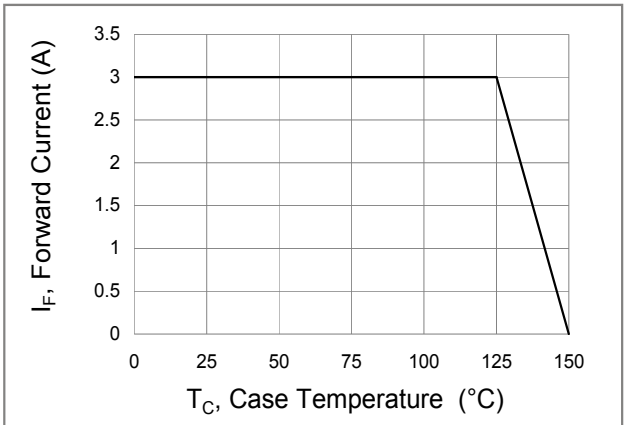


**Fig.1 Forward Current Derating Curve**

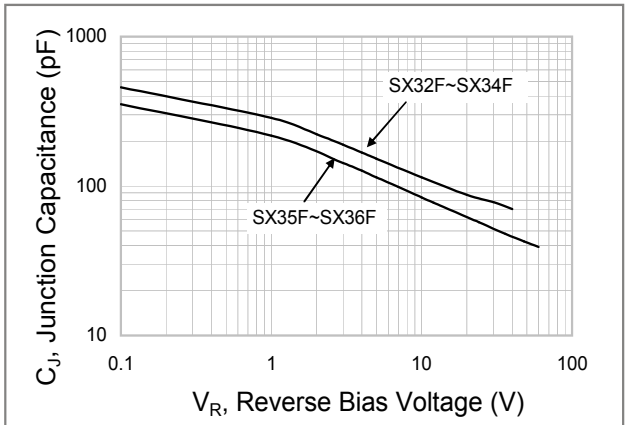


**Fig.2 Typical Junction Capacitance**

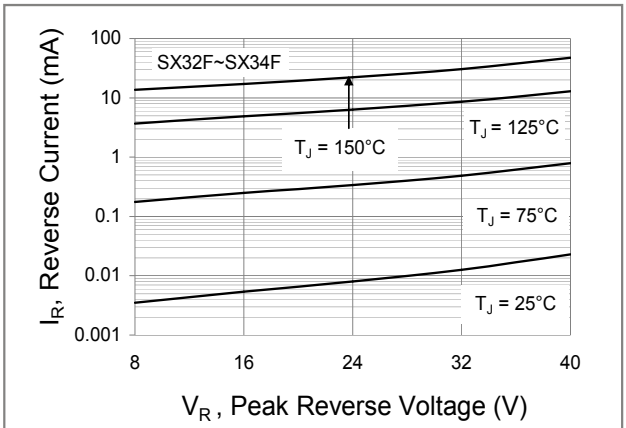


**Fig.3 Typical Reverse Characteristics**

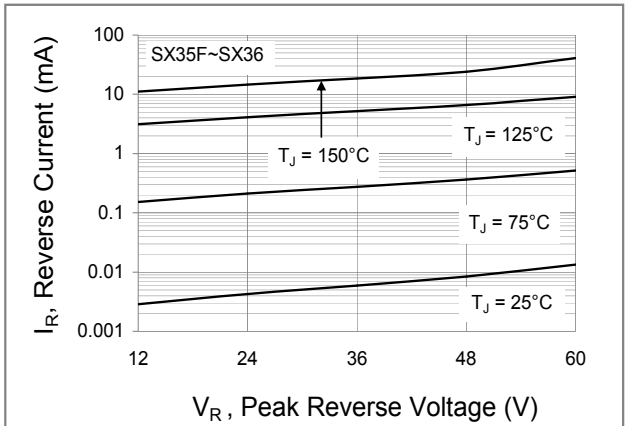


**Fig.4 Typical Reverse Characteristics**

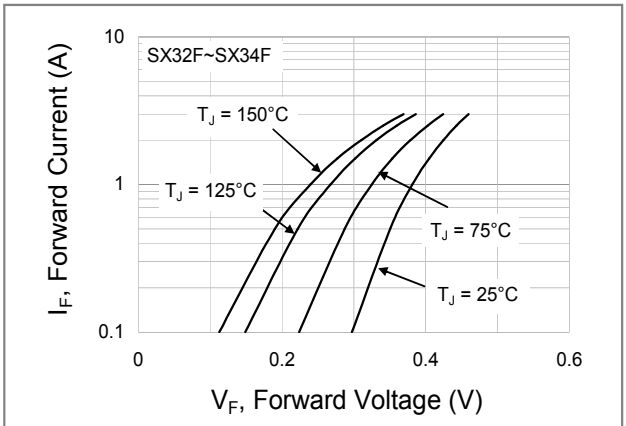


**Fig.5 Typical Forward Characteristics**

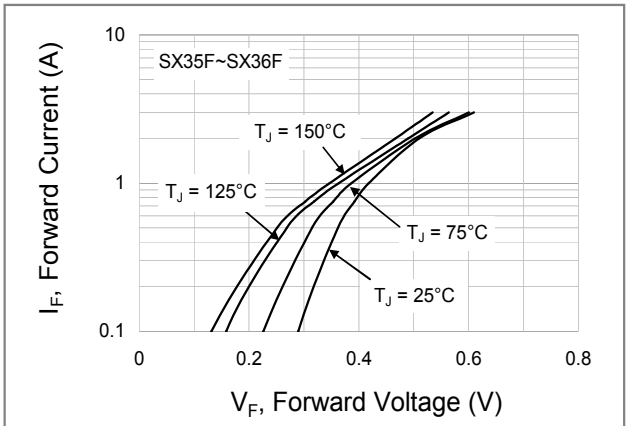


**Fig.6 Typical Forward Characteristics**

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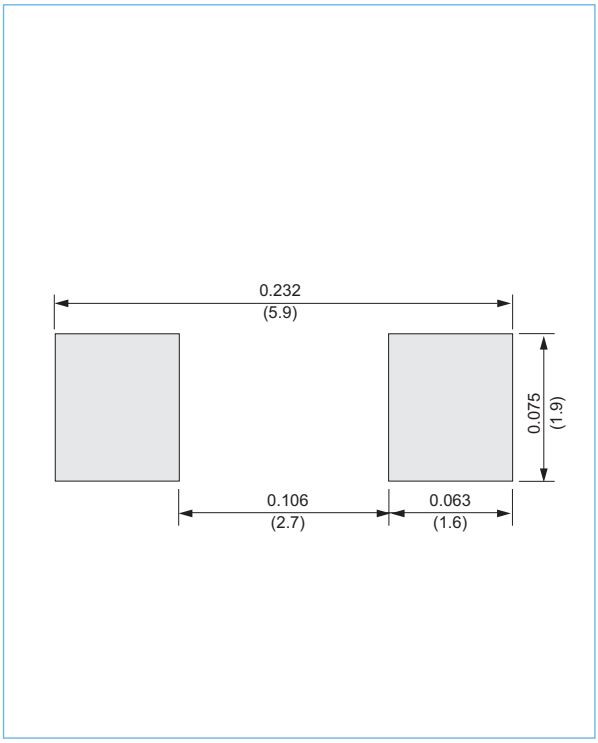
## MOUNTING PAD LAYOUT

SMAF Unit:inch(mm)




## ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7” plastic Reel

## LEGAL STATEMENT

# SX32F SERIES

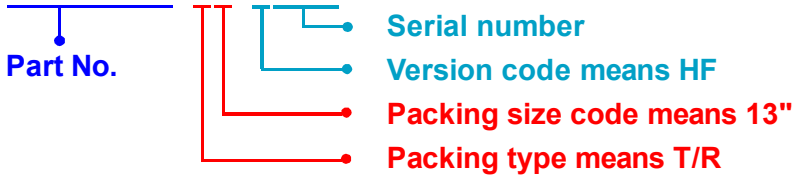
**Part No_packing code_Version**

SX32F_R1_00001

SX32F_R2_00001

**For example :**

**RB500V-40_R2_00001**




| Packing Code XX | | | | Version Code XXXXX | | |
|---|---|---|---|---|---|---|
| Packing type | 1st Code | Packing size code | 2nd Code | HF or RoHS | 1st Code | 2nd~5th Code |
| T/B | A | N/A | 0 | HF | 0 | serial number |
| T/R | R | 7" | 1 | RoHS | 1 | serial number |
| B/P | B | 13" | 2 | | | |
| T/P | T | 26mm | X | | | |
| TRR | S | 52mm | Y | | | |
| TRL | L | PBCU | U | | | |
| FORMING | F | PBCD | D | | | |

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