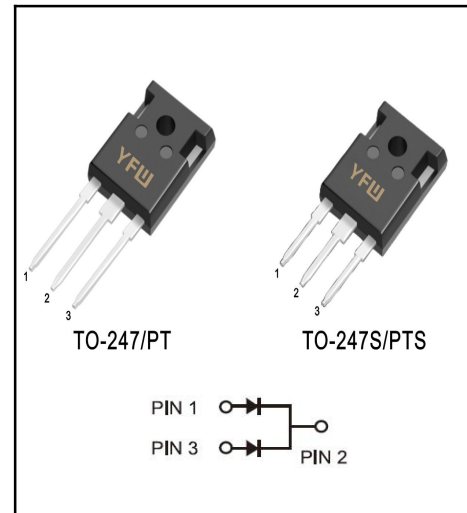


SCHOTTKY BARRIER RECTIFIER
Reverse Voltage - 80 V
Forward Current - 30 A
FEATURES

- ◆Low forward voltage
- ◆High current capability
- ◆High forward surge capability
- ◆Low power losses · High efficiency
- ◆Guarding for over voltage protection
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: TO-247/PT TO-247/PTS
- ◆Solder bath temperature 275°C maximum, 10s per JESD22-106


Primary Characteristic

| | |
|--------------------------|--------------|
| I_o | 2*15A |
| V_{RRM} | 80V |
| I_{FSM} | 220A |
| V_F | 0.57V |
| T_J Max | 150°C |

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

| Parameter | Symbols | Value | Units |
|---|--|------------|-------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 80 | V |
| Maximum RMS voltage | V_{RMS} | 56 | V |
| Maximum DC Blocking Voltage | V_{DC} | 80 | V |
| Maximum Average Forward Rectified Current | Per Leg | 15 | A |
| | Total | 30 | |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave | I_{FSM} | 220 | A |
| Operating Temperature Range | T_J | -50 ~ +150 | °C |
| Storage Temperature Range | T_{STG} | -50 ~ +150 | °C |
| Typical Thermal Resistance (Note1) TO-247PT, TO-247PTS | R_{θJA} R_{θJC} | 2 | °C/W |

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.
Electrical Characteristics (Per Leg) unless otherwise specified

| Characteristics | Symbols | Value | | Units | |
|--|----------------------|------------|------------|-----------|------|
| Forward Voltage Drop(Note2) | V_F | Typ | Max | V | |
| at I _F =5A | | TA=25°C | 0.46 | | - |
| | | TA=125°C | 0.38 | | - |
| at I _F =10A | | TA=25°C | 0.53 | | 0.59 |
| | | TA=125°C | 0.49 | | - |
| at I _F =15A | | TA=25°C | 0.60 | | 0.66 |
| | TA=125°C | 0.57 | - | | |
| Maximum Reverse Current at V _R =80V | I_R | TA=25°C | 15 | uA | |
| | | TA=125°C | 9 | mA | |

Note2: Pulse test: 300 μs pulse width, 1 % duty cycle

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

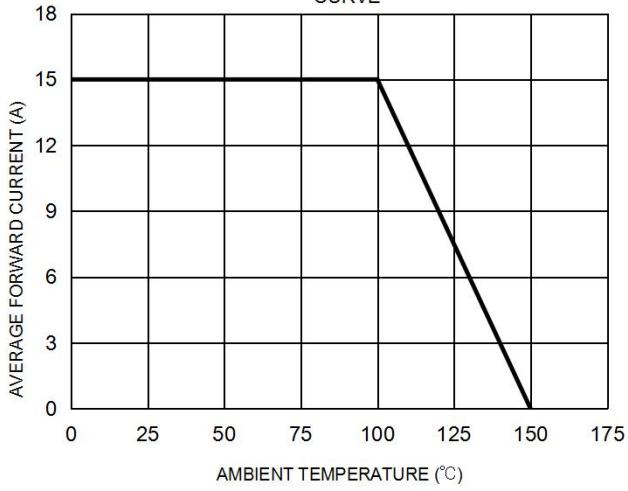


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

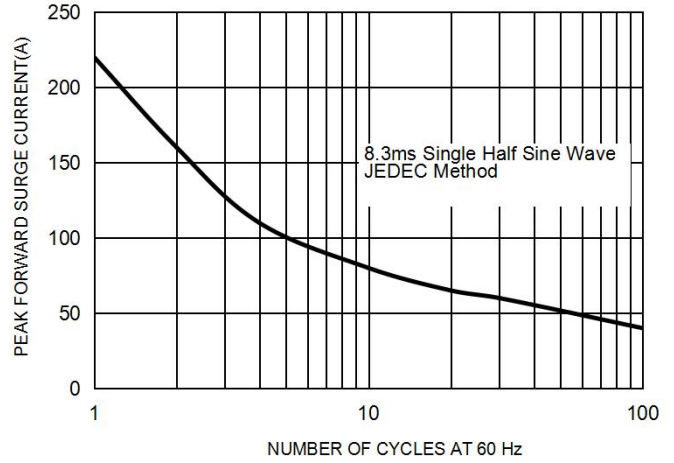


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

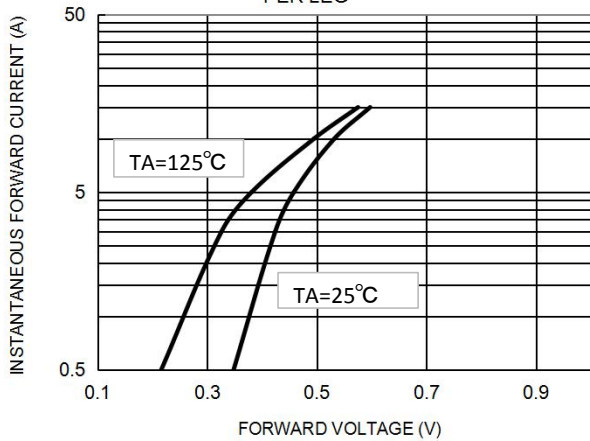
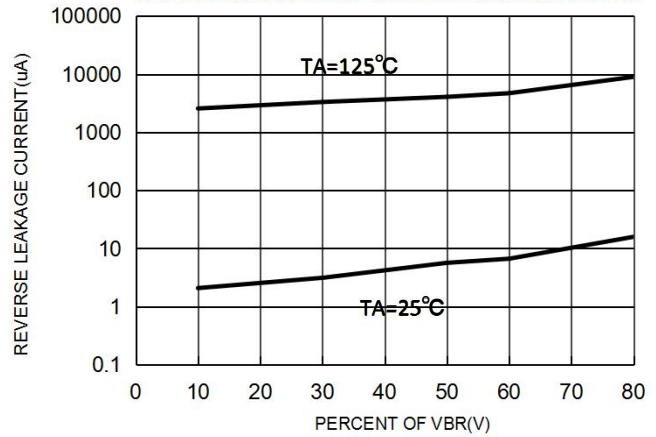
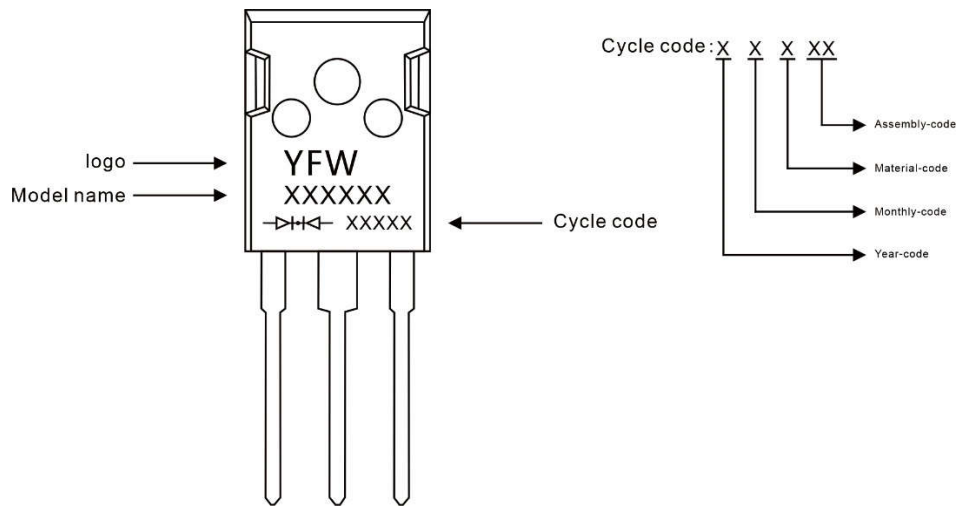


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking Diagram



Ordering information

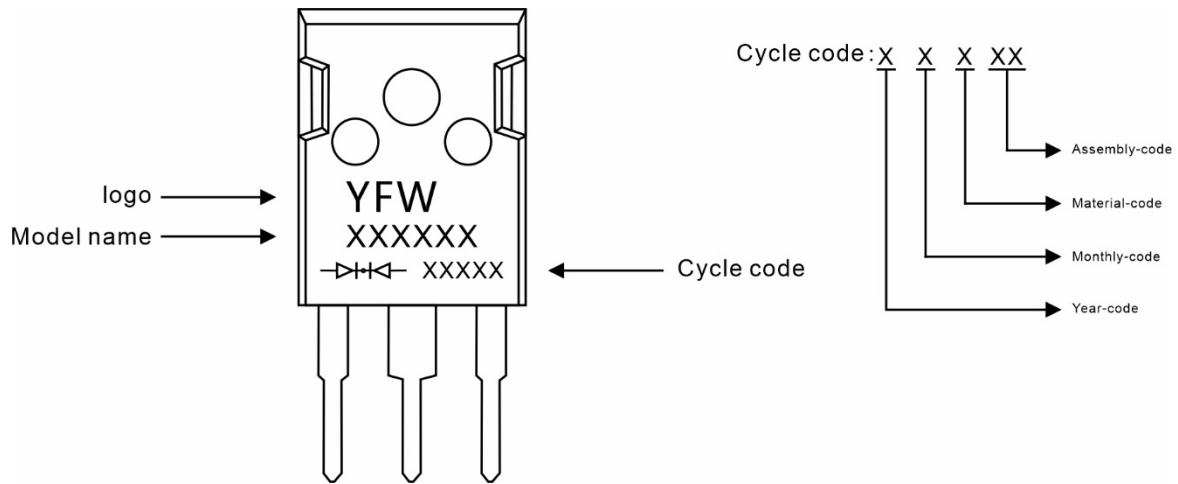
| Model name | Package | Unit Weight | Base Quantity | Packing Quantity |
|------------|---------|----------------|---------------|---------------------------|
| SRT30L80PT | TO-247 | 0.209oz(5.93g) | 30pcs/tube | 600PCS/Box 2400PCS/Carton |

Package Dimensions

TO-247

| Symbol | Dimensions in mm | | Dimensions in Inch | |
|--------|------------------|-------|--------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 4.90 | 5.10 | 0.193 | 0.201 |
| A1 | 1.90 | 2.10 | 0.075 | 0.083 |
| A2 | 2.29 | 2.54 | 0.090 | 0.100 |
| b | 1.00 | 1.40 | 0.039 | 0.055 |
| b1 | 2.00 | 2.20 | 0.079 | 0.087 |
| b2 | 3.00 | 3.20 | 0.118 | 0.126 |
| c | 0.50 | 0.70 | 0.020 | 0.028 |
| D | 15.75 | 16.05 | 0.620 | 0.632 |
| E | 20.20 | 20.80 | 0.795 | 0.819 |
| e | 5.45 (BSC) | | 0.215 (BSC) | |
| e1 | 10.90 (BSC) | | 0.429 (BSC) | |
| F | 6.05 | 6.25 | 0.238 | 0.246 |
| F1 | 5.80 | 6.00 | 0.228 | 0.236 |
| L | 20.10 | 20.40 | 0.791 | 0.803 |
| L1 | 4.05 | 4.35 | 0.159 | 0.171 |
| Φ | 3.50 | 3.70 | 0.138 | 0.146 |

Marking Diagram



Ordering information

| Model name | Package | Unit Weight | Base Quantity | Packing Quantity |
|-------------|---------|----------------|---------------|---------------------------|
| SRT30L80PTS | TO-247S | 0.158oz(4.48g) | 30pcs/tube | 600PCS/Box 2400PCS/Carton |

Package Dimensions

TO-247S

| Symbol | Dimensions in mm | | Dimensions in Inch | |
|--------|------------------|------|--------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 15.0 | 16.0 | 0.59 | 0.63 |
| B | 19.5 | 20.5 | 0.77 | 0.81 |
| C | 33.5 | 35.5 | 1.32 | 1.40 |
| D | 5.0 | 6.0 | 0.20 | 0.24 |
| E | 3.5 | 4.5 | 0.14 | 0.18 |
| F | 2.5 | 3.5 | 0.10 | 0.14 |
| G | 1.75 | 2.5 | 0.07 | 0.14 |
| H | 3.0 | 4.0 | 0.12 | 0.16 |
| I | 9.0 | 11.0 | 0.35 | 0.43 |
| J | 4.9 | 5.1 | 0.19 | 0.20 |
| K | 1.0 | 1.3 | 0.04 | 0.05 |
| L | 3.75 | 4.25 | 0.15 | 0.17 |
| M | 4.75 | 5.25 | 0.19 | 0.21 |
| N | 1.8 | 2.2 | 0.07 | 0.09 |
| O | 0.45 | 0.6 | 0.018 | 0.024 |
| P | 5.08 | | 0.2 | |
| Q | 1.2 | 1.3 | 0.05 | 0.051 |

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