

YG865C15R (20A)

(150V / 20A)

[0401]

High Voltage Schottky barrier diode

Major characteristics

| Characteristics | YG865C15R | Units | Condition |
|------------------|-----------|-------|---------------------------|
| V _{RRM} | 150 | V | |
| V _F | 0.90 | V | T _c =25°C MAX. |
| I _o | 20 | A | |

Features

- Low V_F
- High Voltage
- Center tap connection

Applications

- High frequency operation
- DC-DC converters
- AC adapter

Maximum ratings and characteristics

- Absolute maximum ratings (at T_c=25°C Unless otherwise specified)

| Item | Symbol | Conditions | Rating | Unit |
|---------------------------------------|------------------|--|-------------|------|
| Repetitive peak surge reverse voltage | V _{RSM} | tw=500ns, duty=1/40 | 150 | V |
| Repetitive peak reverse voltage | V _{RRM} | | 150 | V |
| Isolating voltage | V _{iso} | Terminals-to-Case, AC.1min | 1500 | V |
| Average output current | I _o | Square wave, duty=1/2 T _c =101°C | 20 * | A |
| Non-repetitive surge current ** | I _{FSM} | Sine wave 10ms 1shot | 150 | A |
| Operating junction temperature | T _j | | +150 | °C |
| Storage temperature | T _{stg} | | -40 to +150 | °C |

* Out put current of center tap full wave connection

**Rating per element

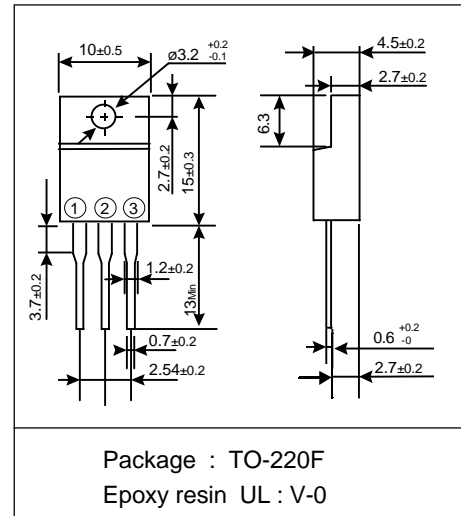
- Electrical characteristics (at T_c=25°C Unless otherwise specified)

| Item | Symbol | Conditions | Max. | Unit |
|----------------------|----------------------|----------------------------------|------|------|
| Forward voltage drop | V _F | I _{FM} =10A | 0.90 | V |
| Reverse current | I _R | V _R =V _{RRM} | 150 | μA |
| Thermal resistance | R _{th(j-c)} | Junction to case | 1.75 | °C/W |

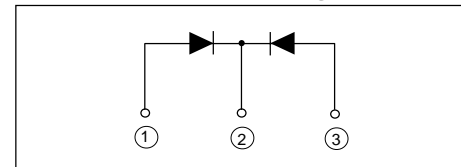
- Mechanical characteristics

| | | | |
|------------------|--------------------|------------|-----|
| Mounting torque | Recommended torque | 0.3 to 0.5 | N·m |
| Approximate mass | | 2 | g |

Outline drawings, mm

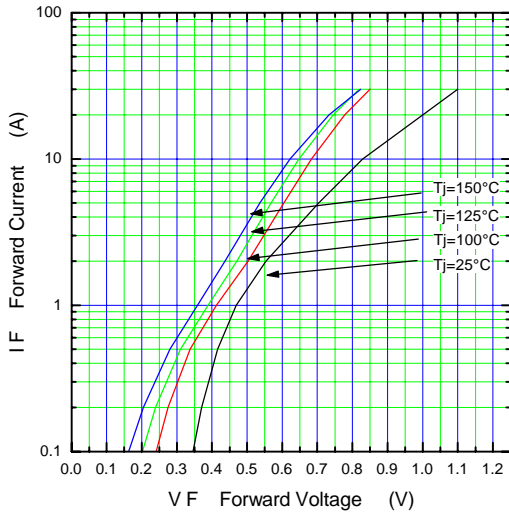


Connection diagram

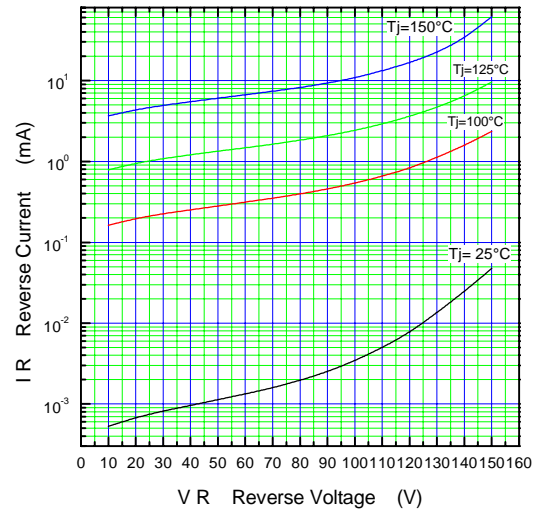


■ Characteristics

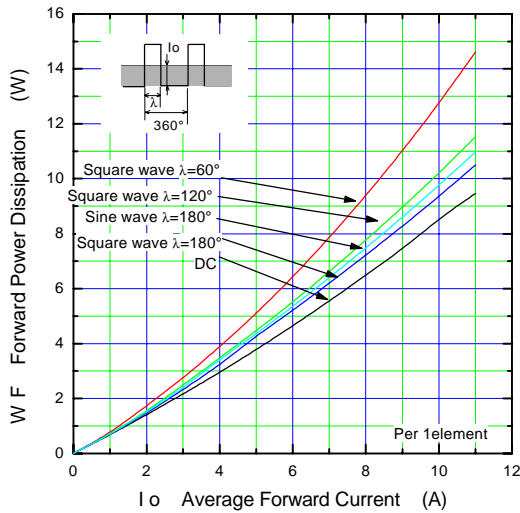
Forward Characteristic (typ.)



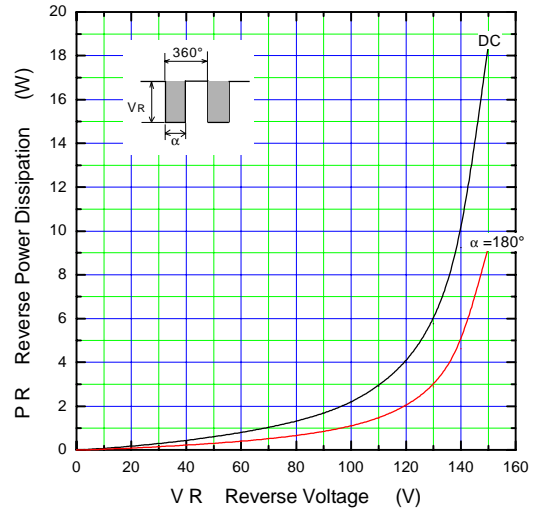
Reverse Characteristic (typ.)



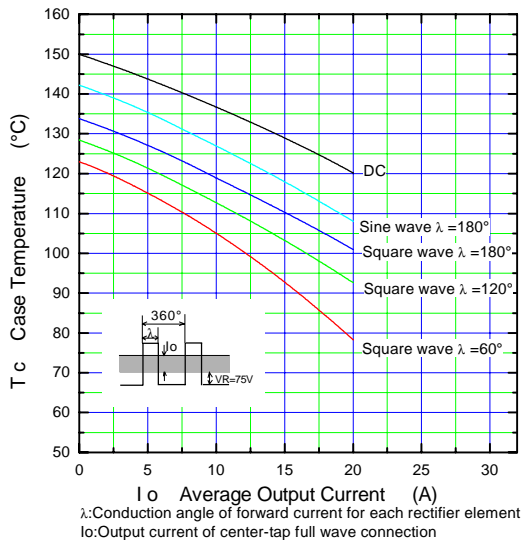
Forward Power Dissipation (max.)



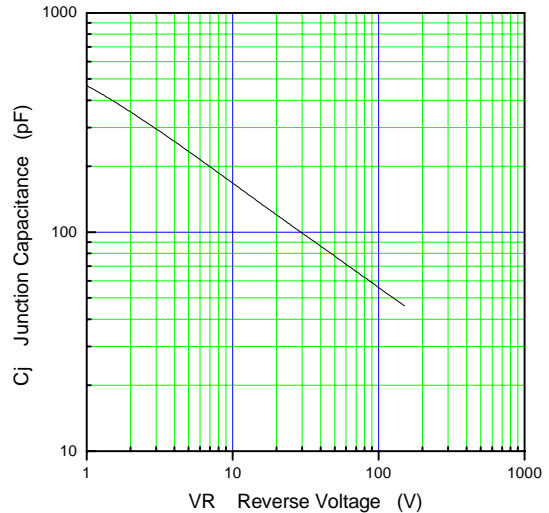
Reverse Power Dissipation (max.)



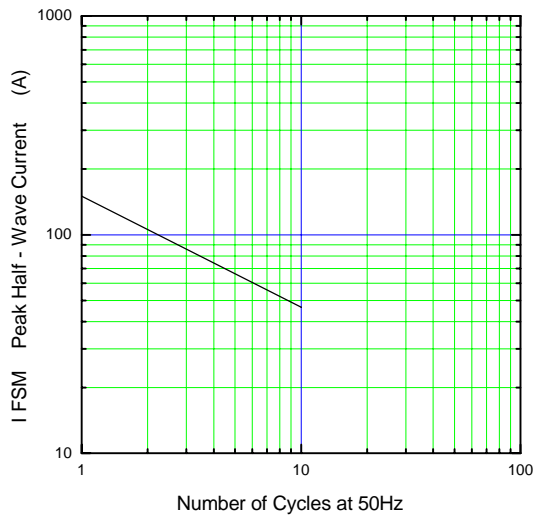
Current Derating (I_o - T_c) (max.)



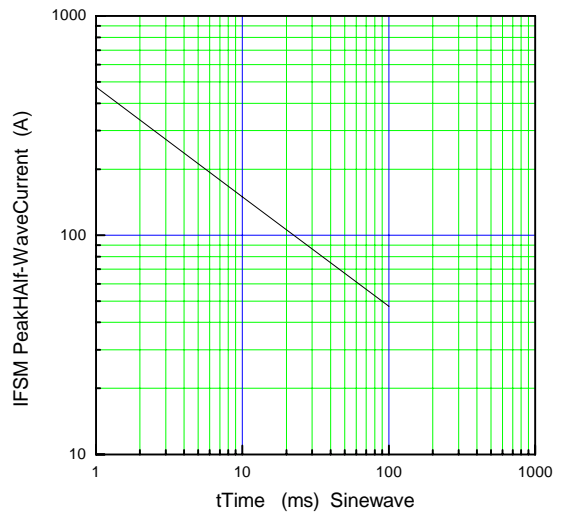
Junction Capacitance Characteristic (max.)



Surge Capability (max.)



Surge Current Ratings (max.)



Transient Thermal Impedance (max.)

