

DUAL SCHOTTKY RECTIFIER

VOLTAGE RANGE: 100 V

CURRENT: 20 A

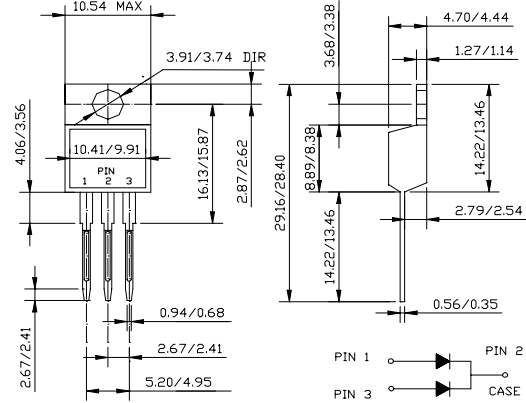
FEATURES

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

MECHANICAL DATA

- ◇ Case: JEDEC TO-220AB, molded plastic body
- ◇ Terminals: Lead solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.08 ounce, 2.24 grams
- ◇ Position: Any

TO-220AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| | | YG805C10 | UNITS |
|--|-------------|-----------------|-------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 100 | V |
| Maximum working peak reverse voltage | V_{RWM} | 70 | V |
| Maximum DC blocking voltage | V_{DC} | 100 | V |
| Maximum average forward rectified current @ $T_C = 91^\circ\text{C}$ | $I_{F(AV)}$ | 20.0 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 100.0 | A |
| Maximum forward voltage per leg @ $I_F = 5.0\text{ A}$ (NOTE 1) | V_F | 0.80 | V |
| Maximum reverse current @ $T_J = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_J = 125^\circ\text{C}$ | I_R | 2.5 40.0 | mA |
| Operating junction temperature range | T_J | - 55 ---- + 150 | °C |
| Storage temperature range | T_{STG} | - 55 ---- + 150 | °C |

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

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FIG.1 – FORWARD CURRENT DERATING CURVE

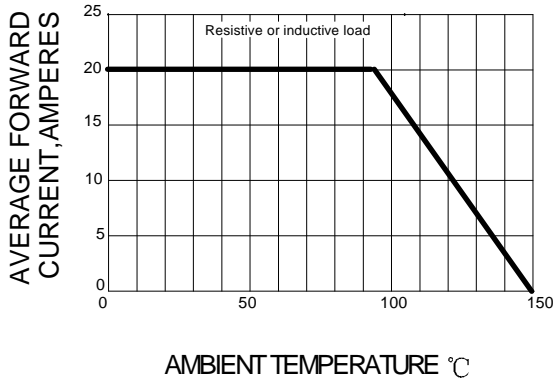


FIG.2. PEAK FORWARD SURGE CURRENT

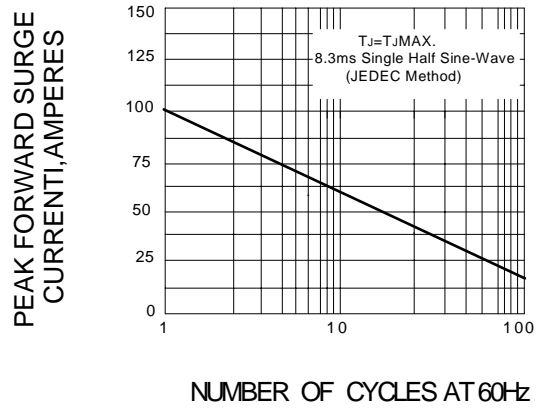


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

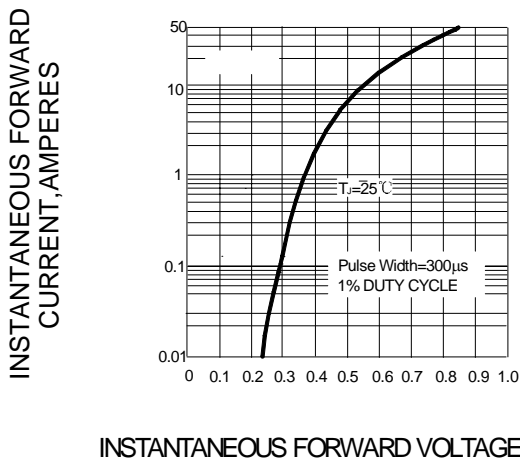


FIG.4 TYPICAL REVERSE CHARACTERISTICS PER LEG

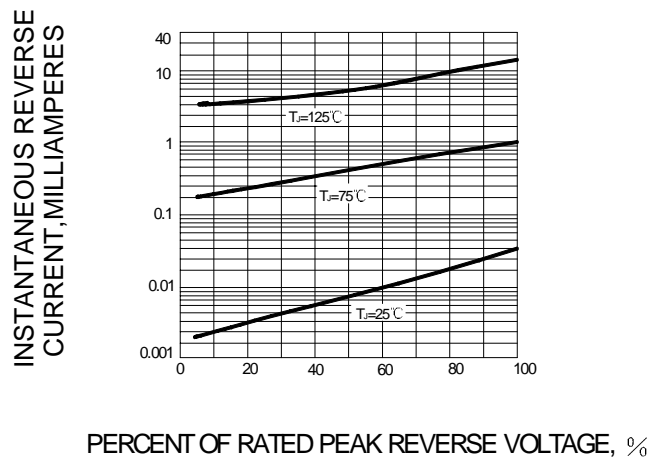


FIG.5 TYPICAL JUNCTION CAPACITANCE PER LEG

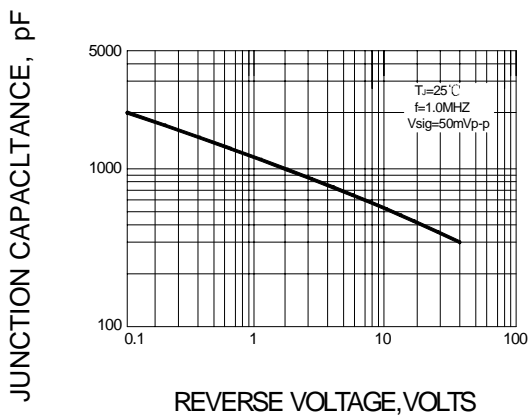


FIG.6 TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

