

Description

Dual center tap schottky rectifier designed for high frequency miniature Switched Mode Power Supplies such as adaptors and on board DC / DC converters.

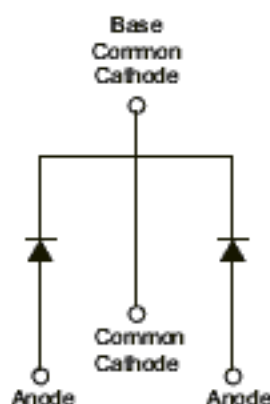
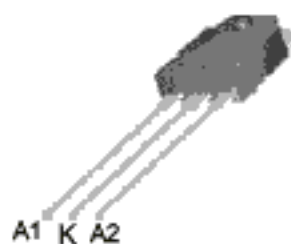
Major Ratings and Characteristics

| Characteristics | Values | Unit |
|--|-----------|------------------|
| $I_{F(AV)}$ Rectangular waveform | 2 X 20 | A |
| V_{RRM} | 125 | V |
| V_F @20 Apk, $T_J = 125^\circ\text{C}$ (per leg) | 0.74 | V |
| T_J range | -55 ~ 175 | $^\circ\text{C}$ |

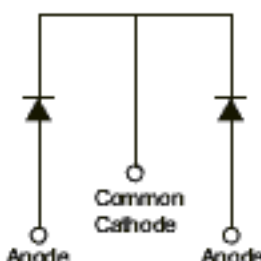
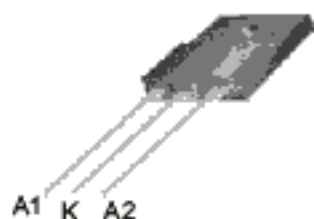
Features

- ◆ NEGLIGIBLE SWITCHING LOSSES
- ◆ HIGH JUNCTION TEMPERATURES CAPABILITY
- ◆ GOOD TRADE OFF BETWEEN LEAKAGE CURRENT AND FORWARD VOLTAGE DROP
- ◆ LOW LEAKAGE CURRENT
- ◆ AVALANCHE RATED
- ◆ INSULATED PACKAGE: TO-3P, TO-3PF

TO-3P

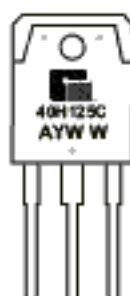


TO-3PF



◆ MARKING INFORMATION

TO - 3P



A : Assemble Location
 Y : Year
 WW : Work Week

◆ ORDERING INFORMATION

| Ordering Number | Package | Shipping |
|-----------------|----------|---------------|
| GMR40H125CTP3T | TO - 3P | 30 Unit/ Tube |
| GMR40H125CTPF3T | TO - 3PF | 30 Unit/ Tube |

* For detail Ordering Number identification, please see last page.

◆ Maximum Ratings (T_c =25°C unless otherwise noted)

| Parameter | Symbol | GMR40H125CT | Unit |
|--|-----------------------------------|---|------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 125 | V |
| Working peak reverse voltage | V _{RWM} | 125 | V |
| Maximum DC blocking voltage | V _{DC} | 125 | V |
| Maximum average forward rectified current <i>Per device Per die</i> | I _{F(AV)} | 40 20 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) per leg | I _{FSM} | 250 | A |
| Peak repetitive current per leg at t _p = 2μs, 1KHz | I _{RRM} | 2 | A |
| Voltage rate of change(rated V _R) | Dv/dt | 10,000 | V/μs |
| Operating junction and storage temperature range | T _J , T _{STG} | -65 to + 175 | °C |
| RMS Isolation voltage (TO-3PF) from terminals to heatsink with T=1 second, RH ≤ 30% | V _{ISOL} | 4500 ⁽¹⁾ 3500 ⁽²⁾ 1500 ⁽³⁾ | V |

◆ Thermal Characteristics ($T_C = 25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | TO-3P | TO-3PF | Unit |
|------------------------------------|-----------------|-------|--------|--------------------|
| Typical thermal resistance per leg | $R_{\theta JC}$ | 0.8 | 1.25 | $^\circ\text{C/W}$ |

Notes:

- (1) Clip mounting (on case), where lead does not overlap heatsink with 0.110" offset
- (2) Clip mounting (on case), where leads do overlap heatsink
- (3) Screw mounting with 4-40 screw, where washer diameter is ≤ 4.9 mm (0.19")
- (4) Pulse test, 300 μs pulse width, 1% duty cycle

◆ Electrical Characteristics ($T_C = 25^\circ\text{C}$ unless otherwise noted)

| Parameter | | Symbol | Value | Unit |
|---|---|--------|-------|---------------------|
| Maximum instantaneous forward voltage per leg at ⁽⁴⁾ | $I_F = 20\text{A}, T_C = 25^\circ\text{C}$ | V_F | 0.85 | V |
| | $I_F = 20\text{A}, T_C = 125^\circ\text{C}$ | | 0.74 | |
| | $I_F = 40\text{A}, T_C = 25^\circ\text{C}$ | | 0.95 | |
| | $I_F = 40\text{A}, T_C = 125^\circ\text{C}$ | | 0.83 | |
| Maximum reverse current per leg at working peak reverse voltage | | I_R | 10 | μA mA |
| | | | 10 | |

◆ Typical Performance Characteristics

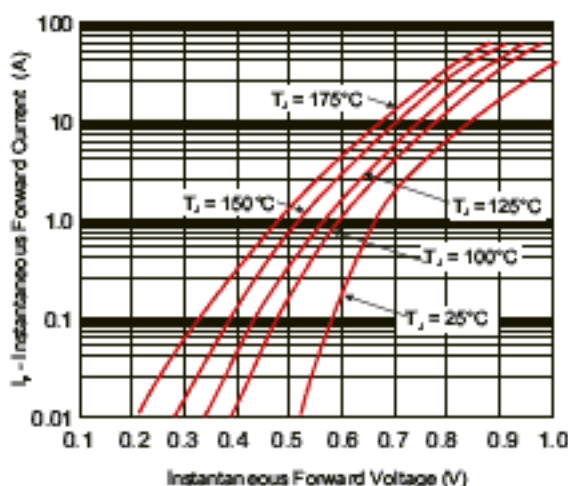
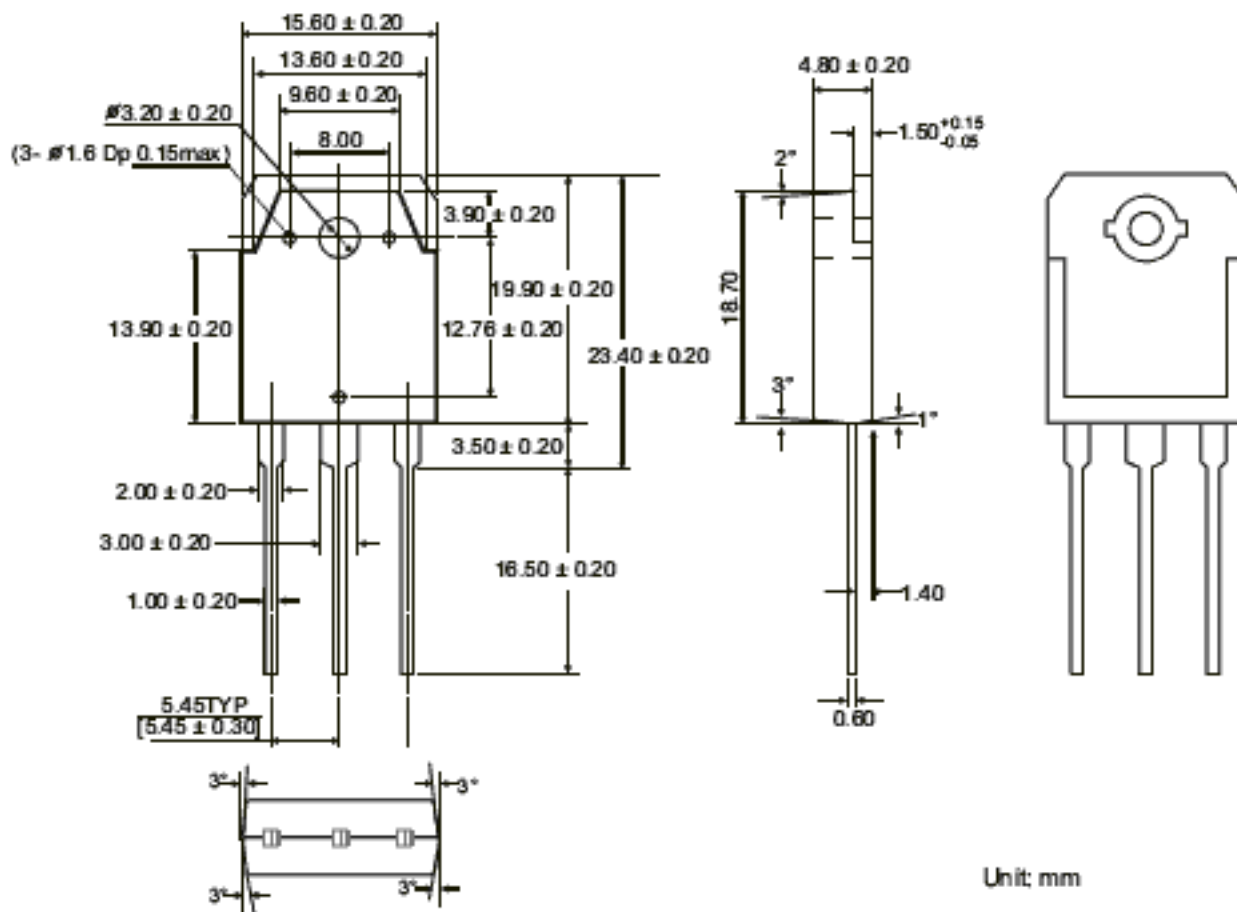


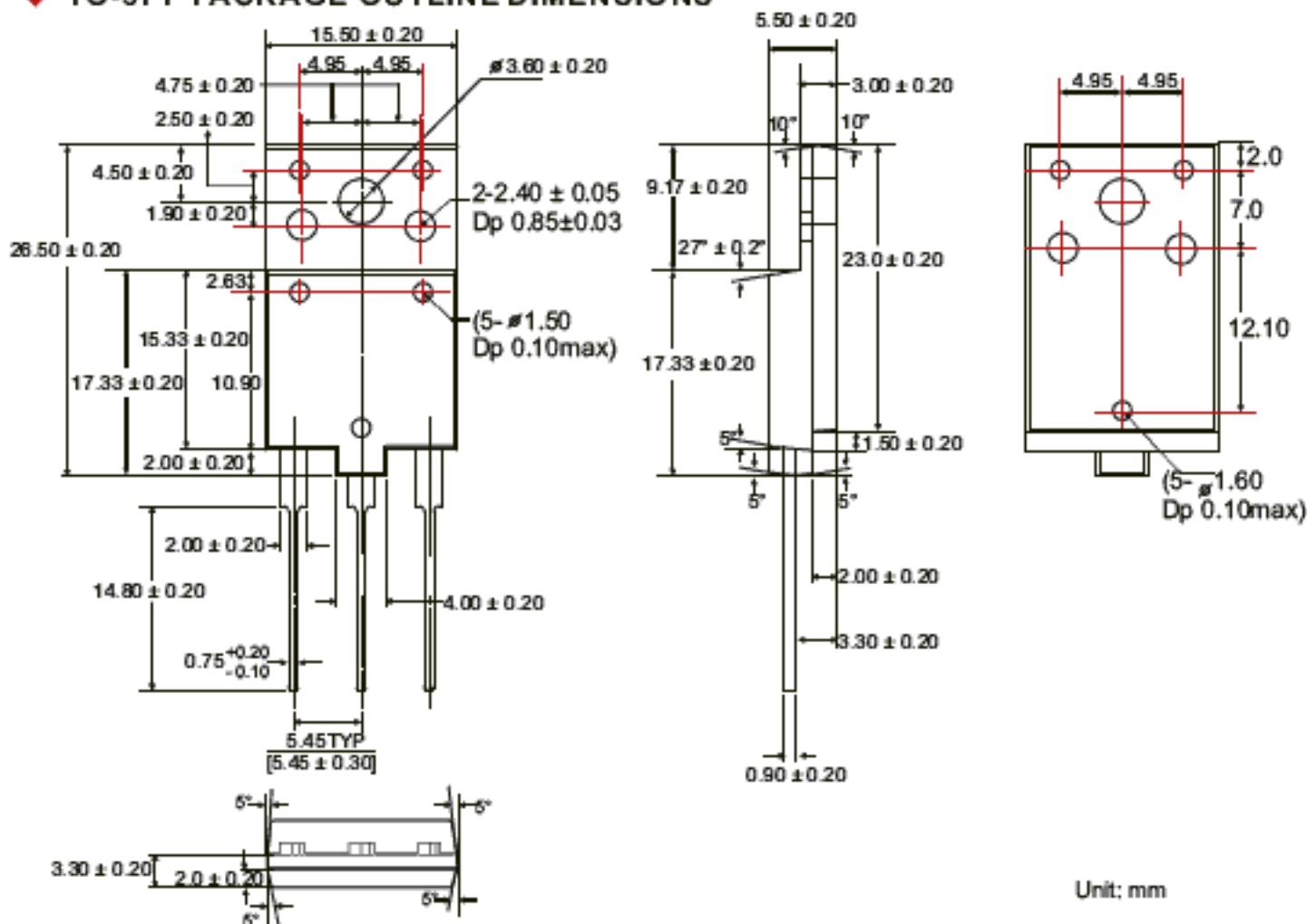
Figure 1. Typical Instantaneous Forward Characteristics

◆ TO-3P PACKAGE OUTLINE DIMENSIONS



Unit: mm

◆ TO-3PF PACKAGE OUTLINE DIMENSIONS



Unit: mm

◆ ORDERING NUMBER

