

## Description

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

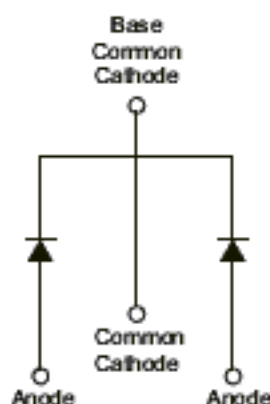
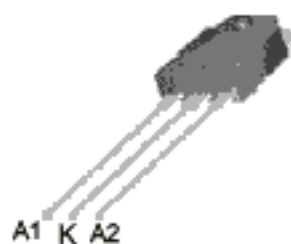
## Major Ratings and Characteristics

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	$^\circ\text{C}$

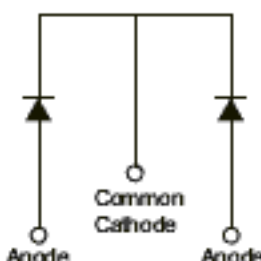
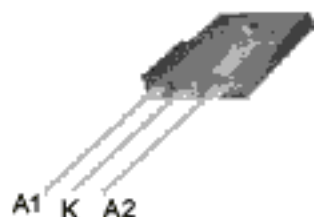
## Features

- ◆ 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

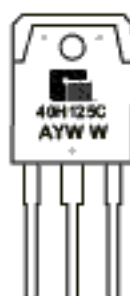


TO-3PF



## ◆ 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<sub>c</sub> =25°C unless otherwise noted)

Parameter	Symbol	GMR40H125CT	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	125	V
Working peak reverse voltage	V <sub>RWM</sub>	125	V
Maximum DC blocking voltage	V <sub>DC</sub>	125	V
Maximum average forward rectified current <i>Per device Per die</i>	I <sub>F(AV)</sub>	40 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) per leg	I <sub>FSM</sub>	250	A
Peak repetitive current per leg at t <sub>p</sub> = 2μs, 1KHz	I <sub>RRM</sub>	2	A
Voltage rate of change(rated V <sub>R</sub> )	Dv/dt	10,000	V/μs
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to + 175	°C
RMS Isolation voltage (TO-3PF) from terminals to heatsink with T=1 second, RH ≤ 30%	V <sub>ISOL</sub>	4500 <sup>(1)</sup> 3500 <sup>(2)</sup> 1500 <sup>(3)</sup>	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  $\leq 4.9$  mm (0.19")
- (4) Pulse test, 300 $\mu\text{s}$  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 <sup>(4)</sup>	$V_F$	$I_F = 20\text{A}, T_C = 25^\circ\text{C}$	0.85
		$I_F = 20\text{A}, T_C = 125^\circ\text{C}$	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	$I_R$	$T_J = 25^\circ\text{C}$	10
		$T_J = 125^\circ\text{C}$	10

◆ Typical Performance Characteristics

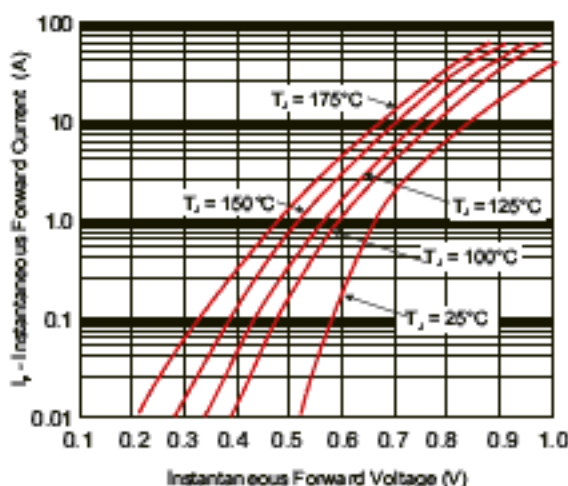
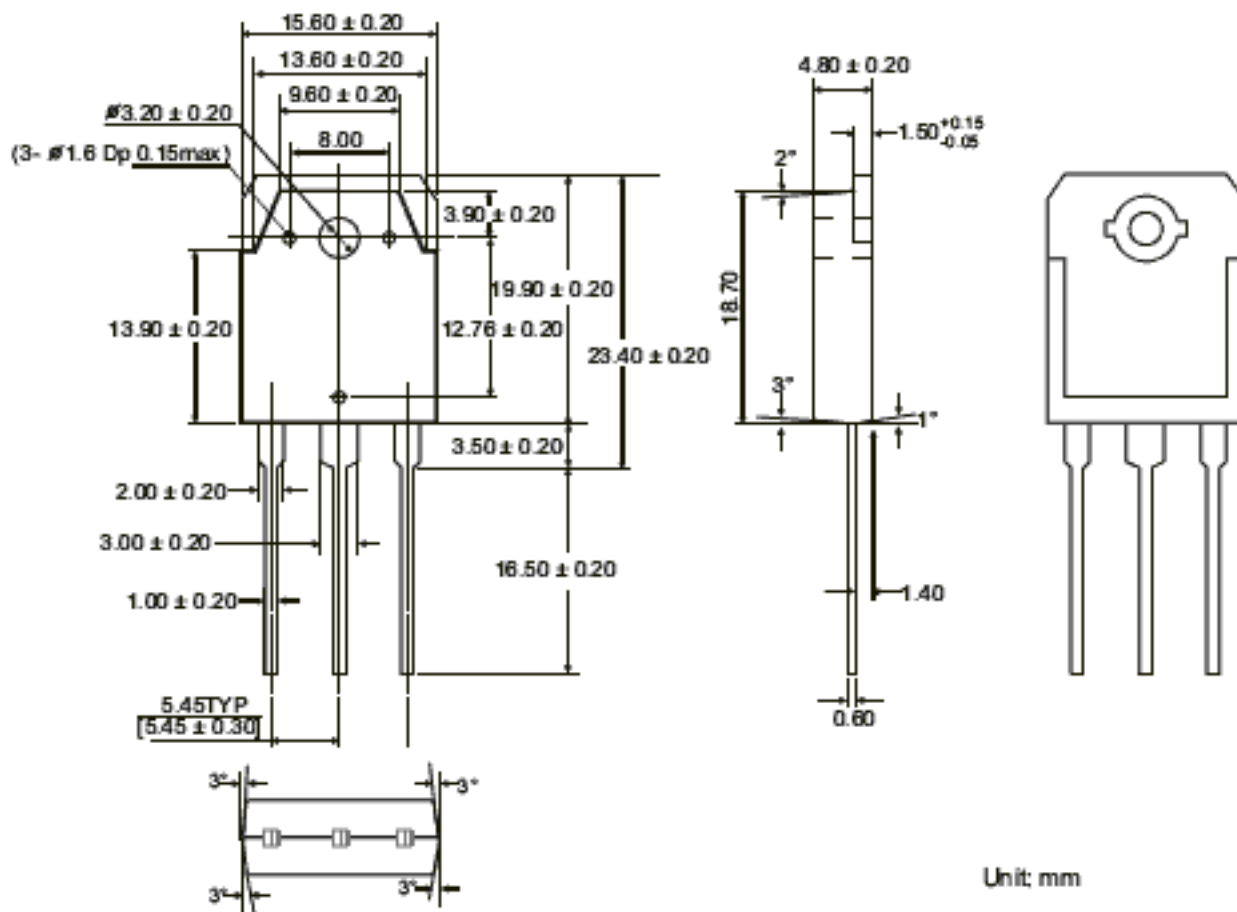


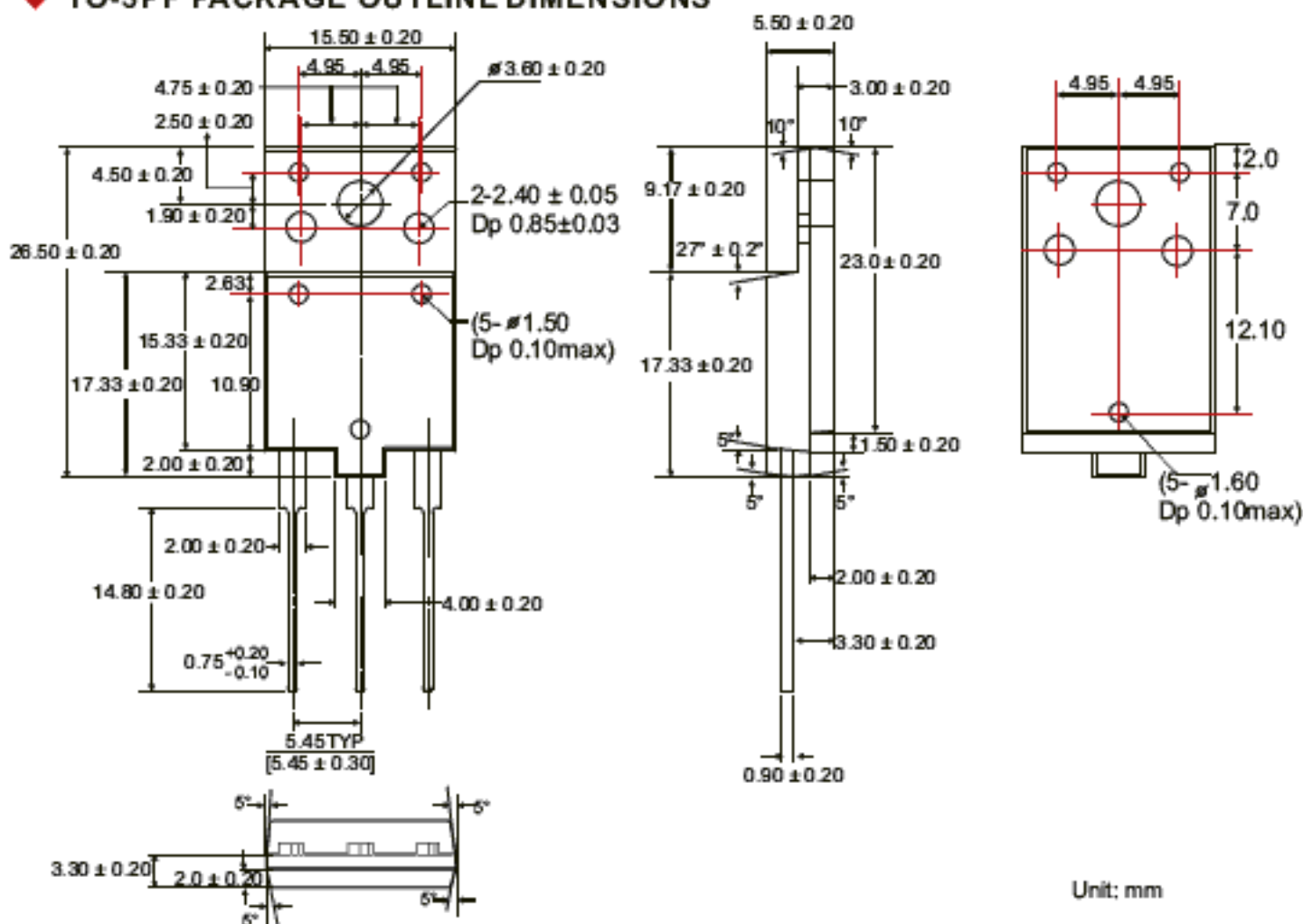
Figure 1. Typical Instantaneous Forward Characteristics

◆ TO-3P PACKAGE OUTLINE DIMENSIONS



Unit: mm

◆ TO-3PF PACKAGE OUTLINE DIMENSIONS



Unit: mm

## ◆ ORDERING NUMBER

