

Description

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

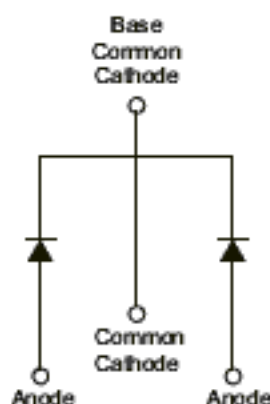
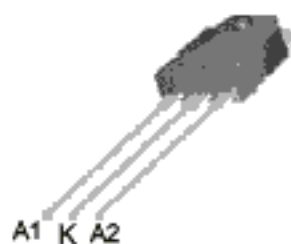
Major Ratings and Characteristics

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	$^\circ\text{C}$

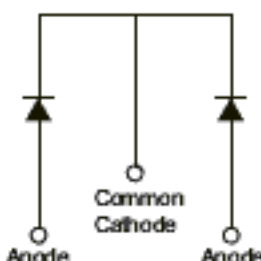
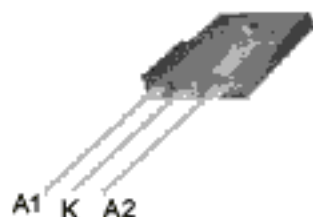
Features

- ◆ 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

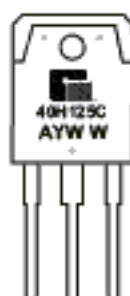


TO-3PF



◆ 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 (Tc = 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 tp = 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	$T_J = 25^\circ\text{C}$	I_R	10	μA
	$T_J = 125^\circ\text{C}$		10	

◆ Typical Performance Characteristics

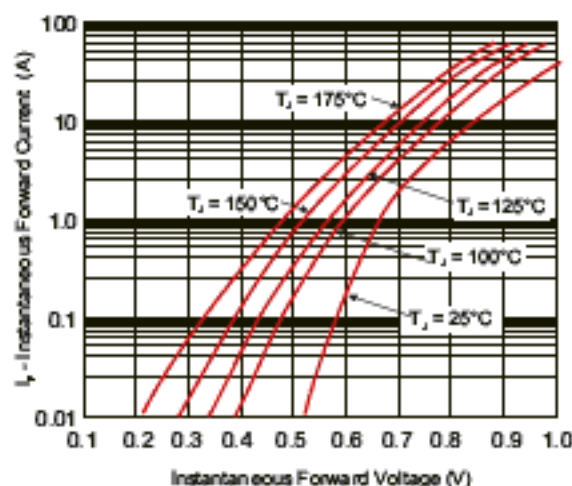
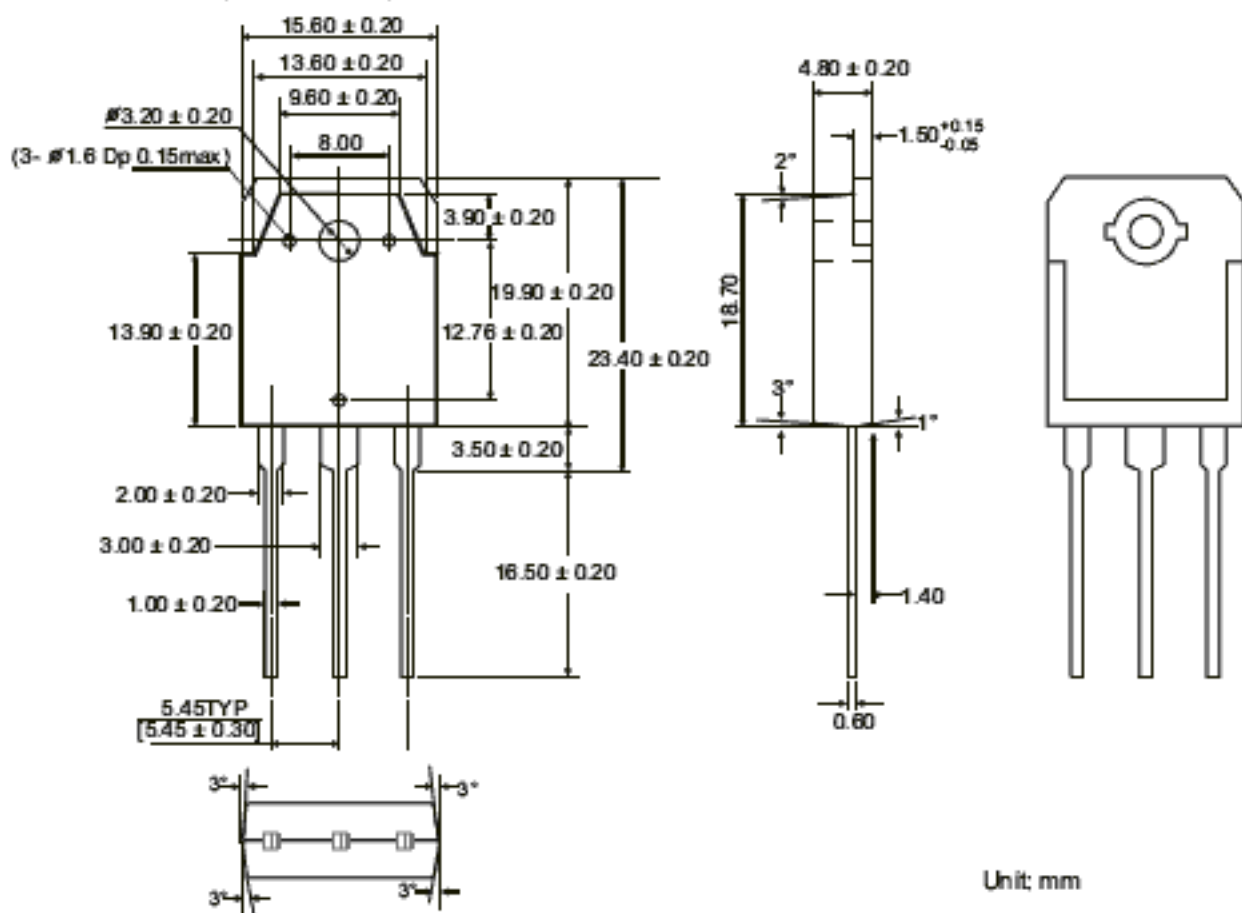
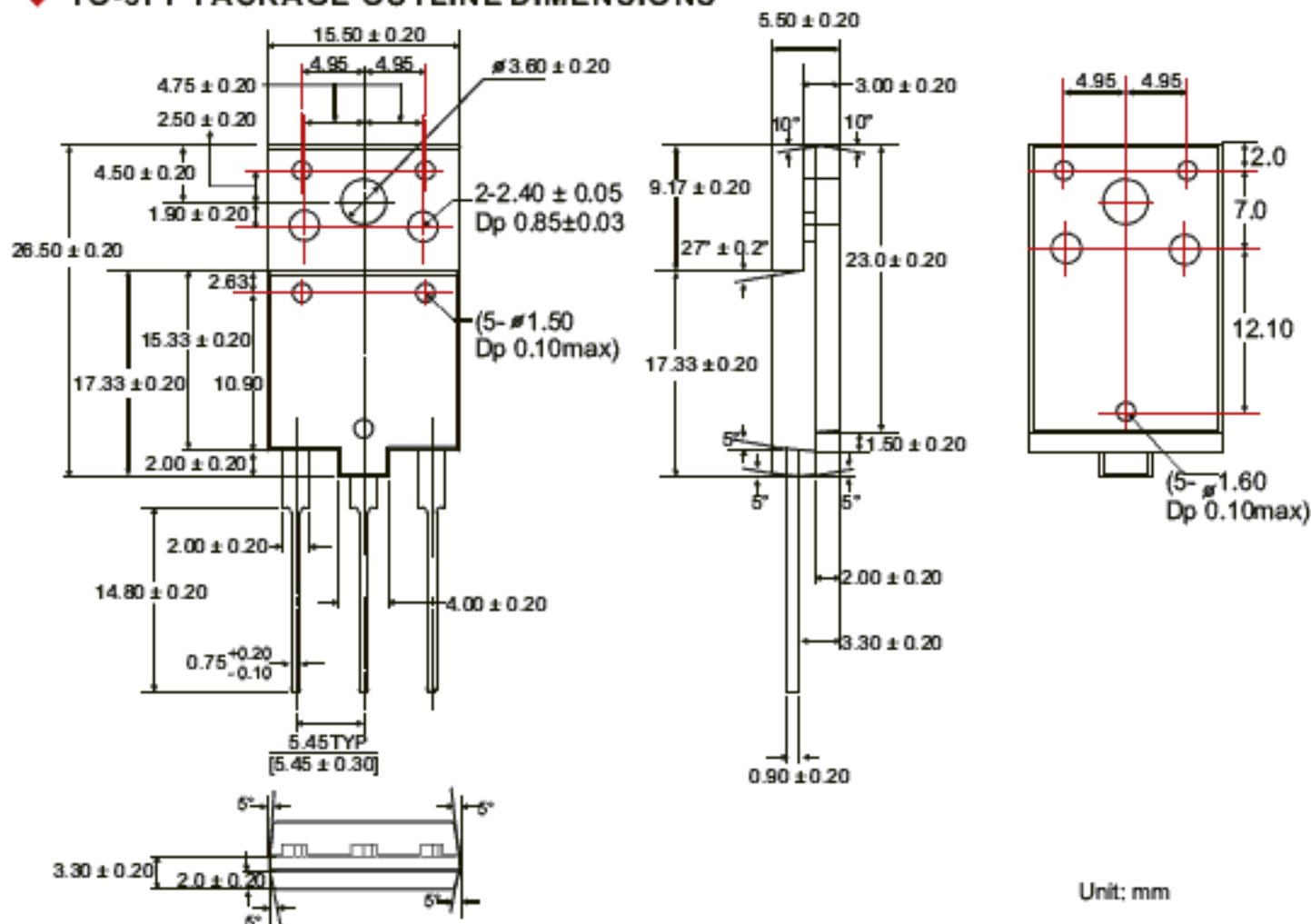


Figure 1. Typical Instantaneous Forward Characteristics

◆ TO-3P PACKAGE OUTLINE DIMENSIONS



◆ TO-3PF PACKAGE OUTLINE DIMENSIONS



◆ ORDERING NUMBER

