DESCRIPTION

Dual center tap schottky rectifier designed for high frequency miniature Switched Mode Power Supplies.

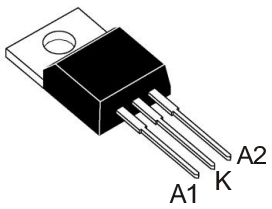
Major Ratings and Characteristics

Characteristics	Values	Unit
$I_{F(AV)}$ Rectangular waveform	2 X 20	A
V_{RRM}	100	V
V_F @20 Apk, T_C = 125°C (per leg)	0.67	V
T_J range	-45 ~ +150	°C

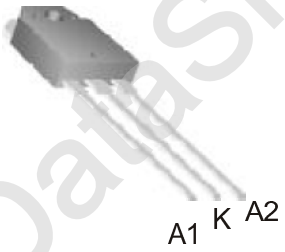
FEATURES

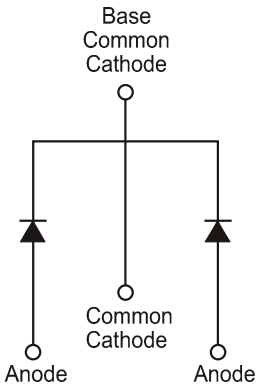
- **High junction temperature capability**
- **Good trade off between leakage current and forward voltage drop**
- **Low leakage current**

TO-220AB

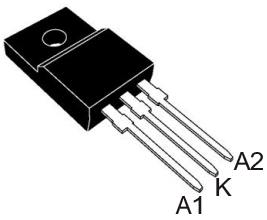


TO-3P

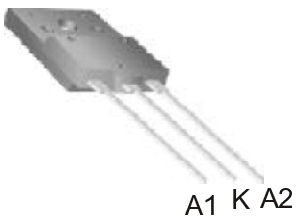


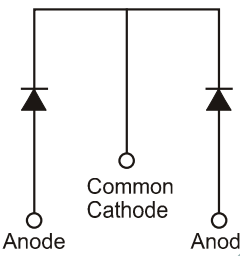


TO-220FPAB



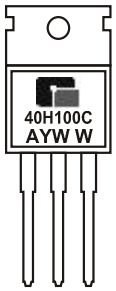
TO-3PF



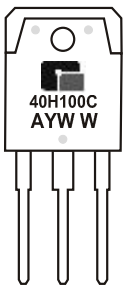


◆ MARKING INFORMATION

TO - 220AB



TO - 3P



A : Assemble Location
Y : Year
WW : Work Week

◆ ORDERING INFORMATION

Ordering Number	Package	Shipping
GMR40H100CTP3T	TO - 3P	30 Unit/ Tube
GMR40H100CTPF3T	TO - 3PF	30 Unit/ Tube
GMR40H100CTB3T	TO - 220AB	50 Unit/ Tube
GMR40H100CTBF3T	TO - 220FPAB	50 Unit/ Tube

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

◆ ABSOLUTE RATINGS

Symbol	Parameter				Value	Unit
V_{RRM}	Repetitive peak reverse voltage				100	V
$I_{F(AV)}$	Average forward current $\delta = 0.5$	TO-220AB TO-3P	T_C = 155°C	per diode per device	20 40	A
I_{FSM}	Surge non repetitive forward current		tp = 10 ms sinusoidal		250	A
T_{stg}	Storage temperature range				-45 to + 150	°C
T_J	Maximum operating junction temperature*				175	°C
dV/dt	Critical rate of rise of reverse voltage				10000	V/ µs

* : $\frac{dPtot}{dTj} < \frac{1}{Rth(j-a)}$ thermal runaway condition for a diode on its own heat sink

◆ Thermal Characteristics (T_C = 25°C unless otherwise noted)

Parameter	Symbol	TO-220AB	TO-220FPAB	TO-3P	TO-3PF	Unit
Typical thermal resistance per leg	RΘJC	1.7	3.8	0.9	1.25	°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,300μs pulse width,1% duty cycle

◆ Electrical Characteristics (Tc = 25°C unless otherwise noted)

Parameter			Symbol	Value	Unit
Maximum instantaneous forward voltage per leg at(4)	I_F = 20A,	T_C = 25°C	V_F	0.79	V
	I_F = 20A,	T_C = 125°C		0.67	
	I_F = 40A,	T_C = 25°C		0.89	
	I_F = 40A,	T_C = 125°C		0.74	
Maximum reverse current per leg at working peak reverse voltage		T_J = 25°C	I_R	10	μA
		T_J = 125°C		10	mA

◆ Typical Performance Characteristics

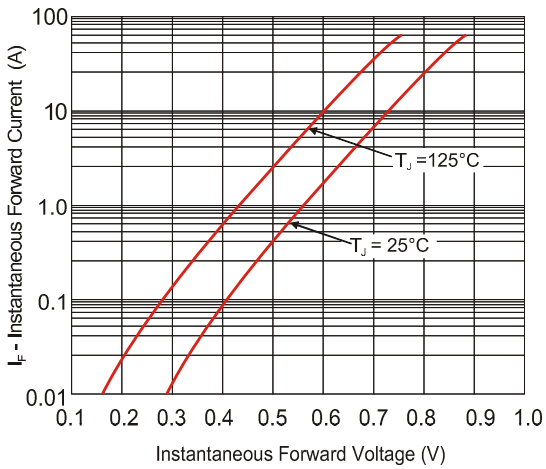
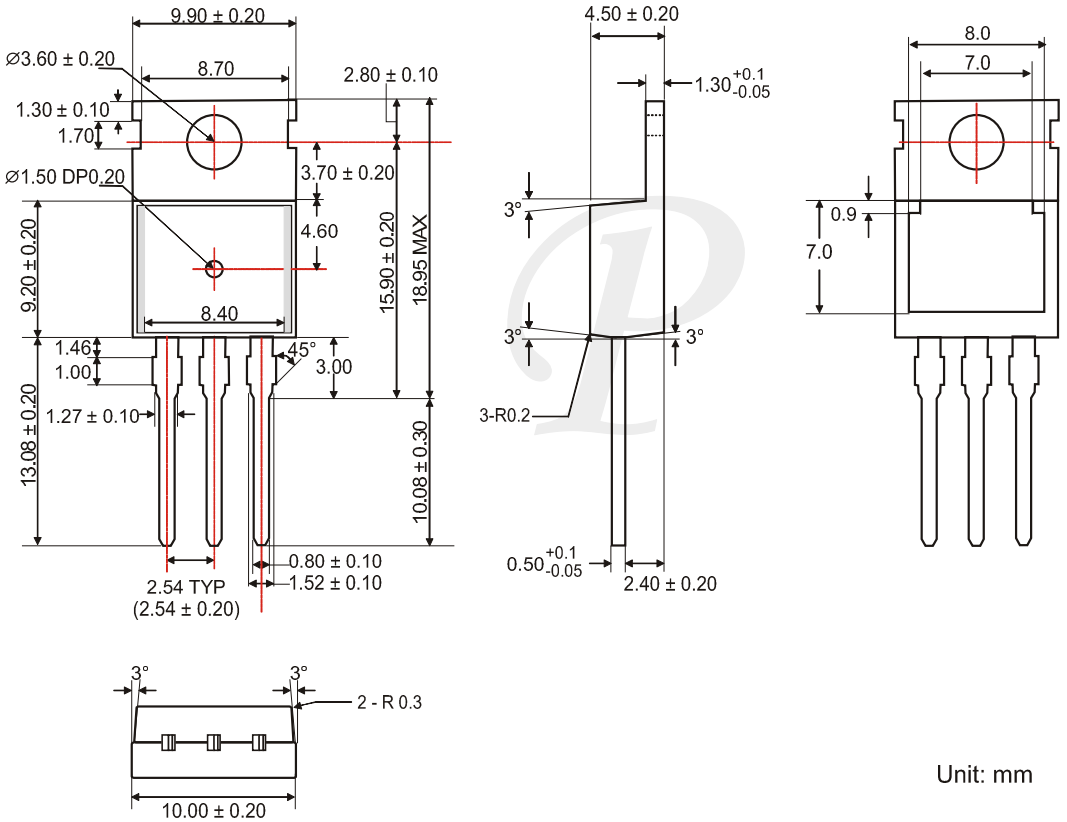


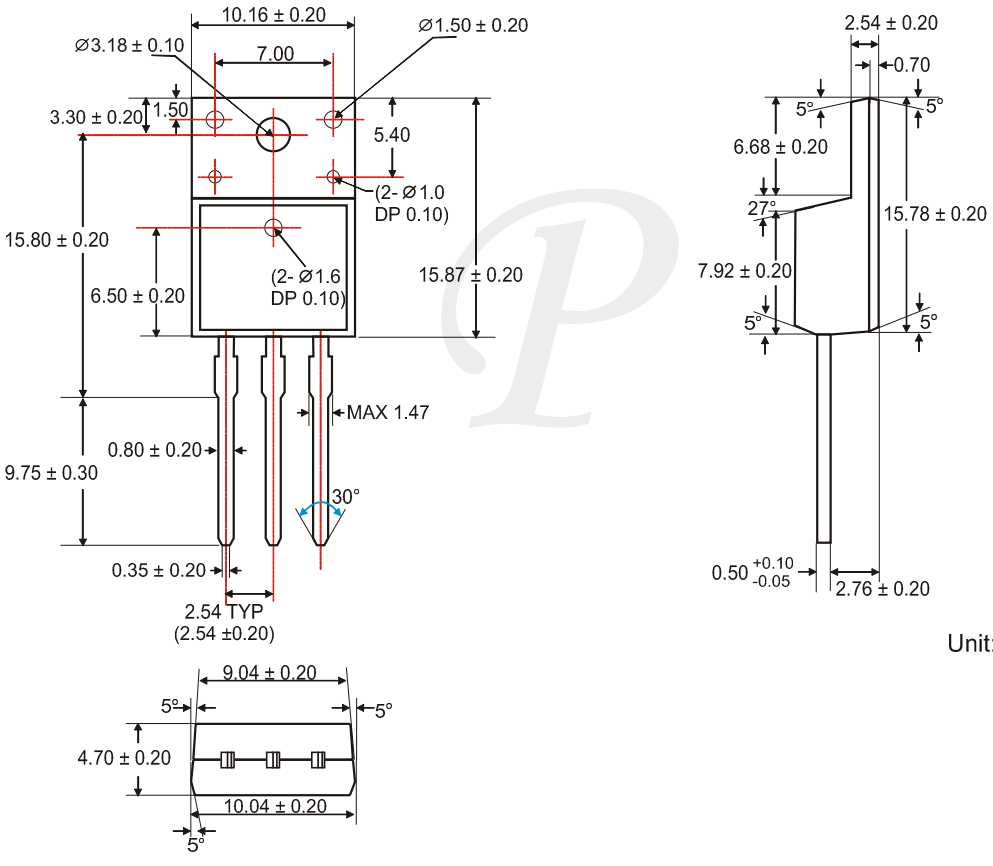
Figure 1. Typical Instantaneous Forward Characteristics

◆ TO-220AB PACKAGE OUTLINE DIMENSIONS



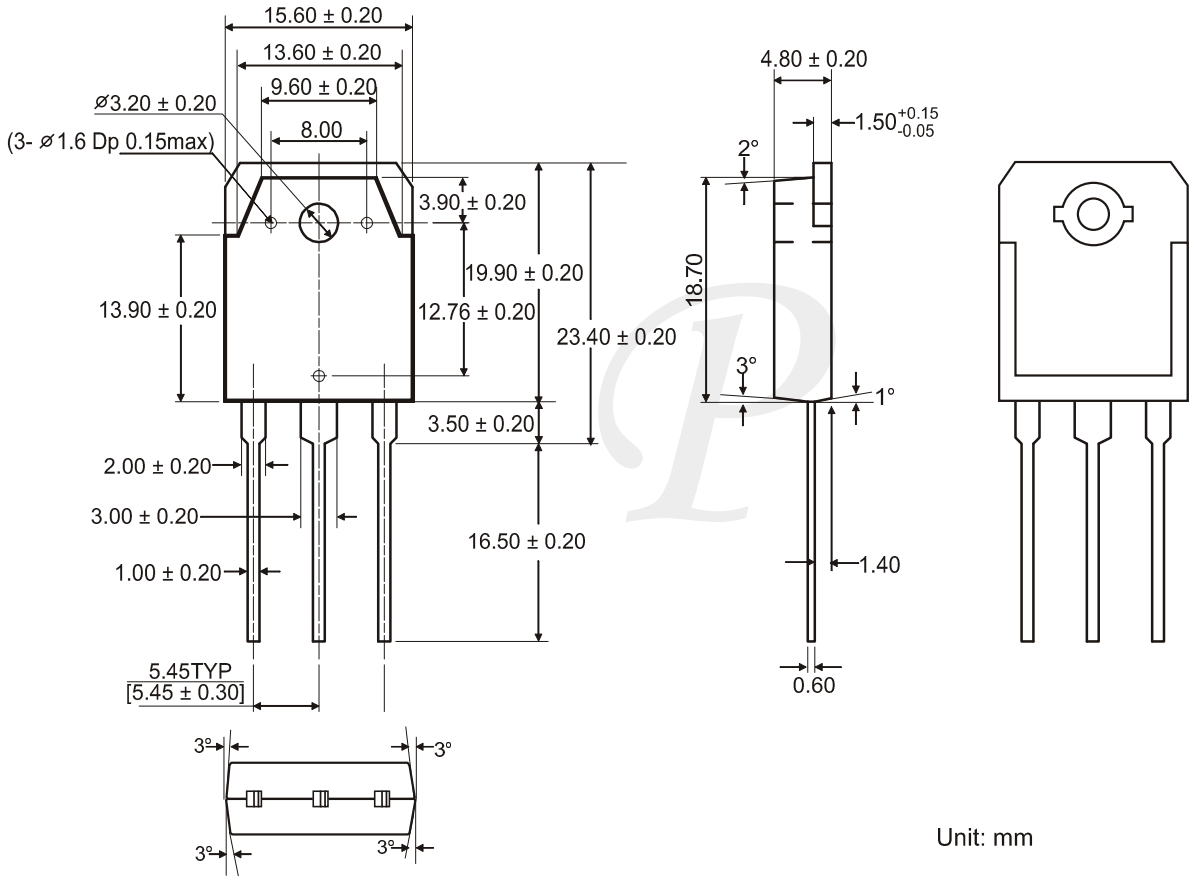
Unit: mm

◆ TO-220FPAB PACKAGE OUTLINE DIMENSIONS



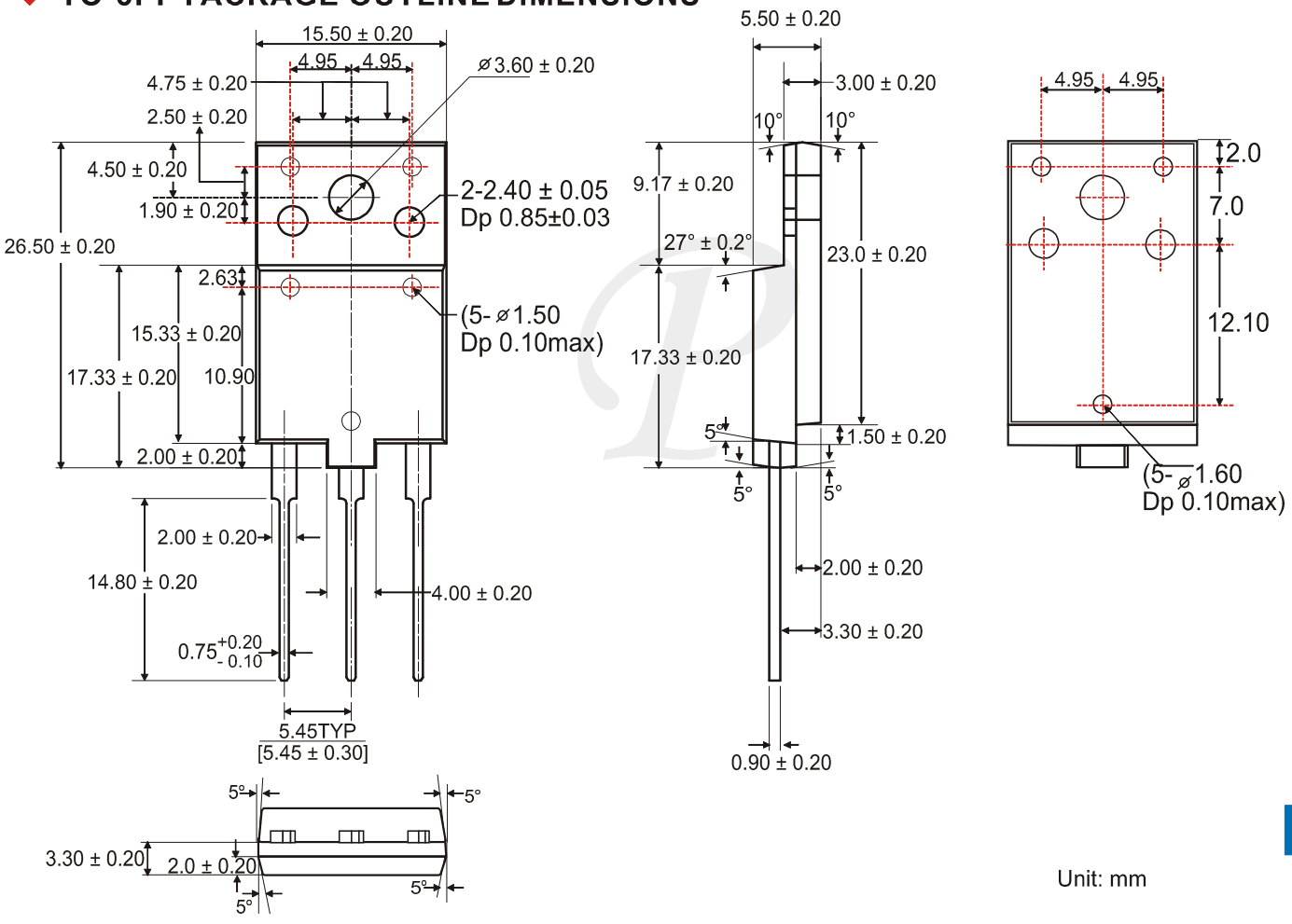
Unit: mm

TO-3P PACKAGE OUTLINE DIMENSIONS



Unit: mm

TO-3PF PACKAGE OUTLINE DIMENSIONS



Unit: mm

◆ ORDERING NUMBER