

DESCRIPTION

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

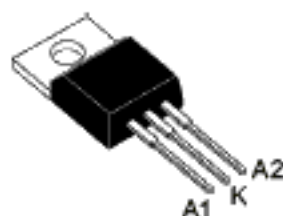
Major Ratings and Characteristics

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

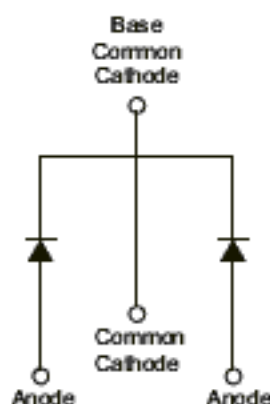
FEATURES

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

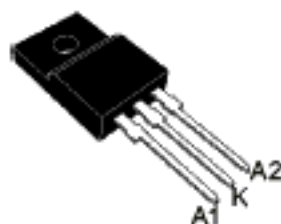
TO-220AB



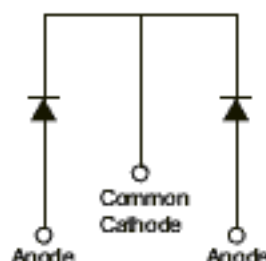
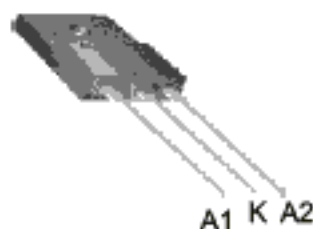
TO-3P



TO-220FPAB



TO-3PF

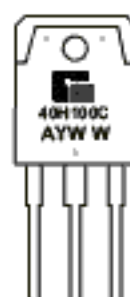


◆ MARKING INFORMATION

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	$T_C = 155^{\circ}\text{C}$	per diode per device	20 40	A		
I_{FSM}	Surge non repetitive forward current		$t_p = 10\text{ ms}$ sinusoidal		250	A		
T_{stg}	Storage temperature range				-45 to + 150	$^{\circ}\text{C}$		
T_J	Maximum operating junction temperature*				175	$^{\circ}\text{C}$		
dV/dt	Critical rate of rise of reverse voltage				10000	V/ μs		

* : $\frac{dP_{tot}}{dT_J} < \frac{1}{R_{th(j-a)}}$ thermal runaway condition for a diode on its own heat sink

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

Parameter	Symbol	TO-220AB	TO-220FPAB	TO-3P	TO-3PF	Unit
Typical thermal resistance per leg	$R_{\theta JC}$	1.7	3.8	0.9	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 $\leq 4.9\text{ mm}$ (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	0.79	V
	$I_F = 20\text{A}, T_C = 125^\circ\text{C}$		0.67	
	$I_F = 40\text{A}, T_C = 25^\circ\text{C}$		0.89	
	$I_F = 40\text{A}, T_C = 125^\circ\text{C}$		0.74	
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	mA

◆ Typical Performance Characteristics

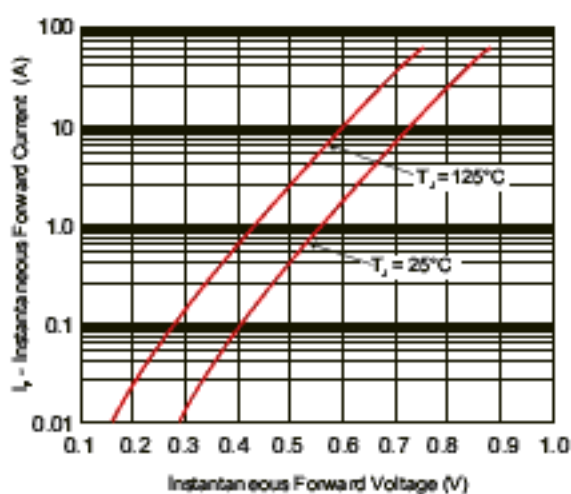
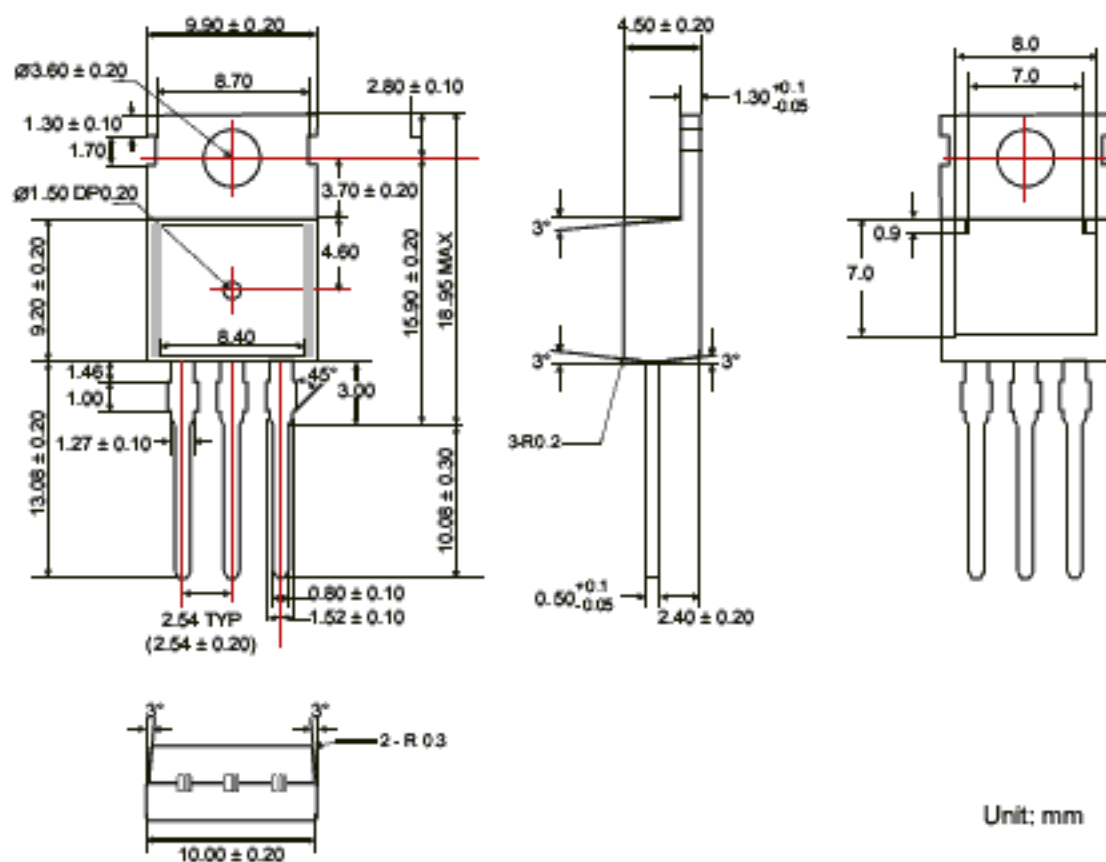
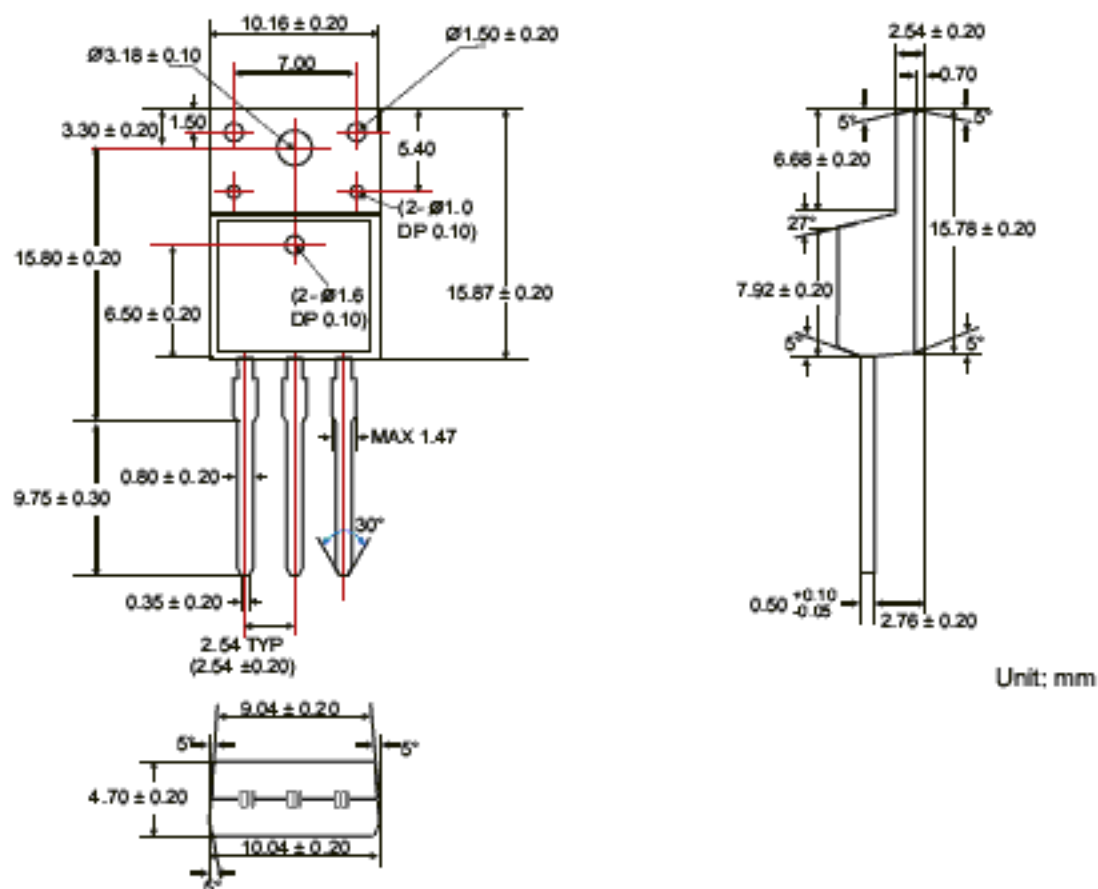


Figure 1. Typical Instantaneous Forward Characteristics

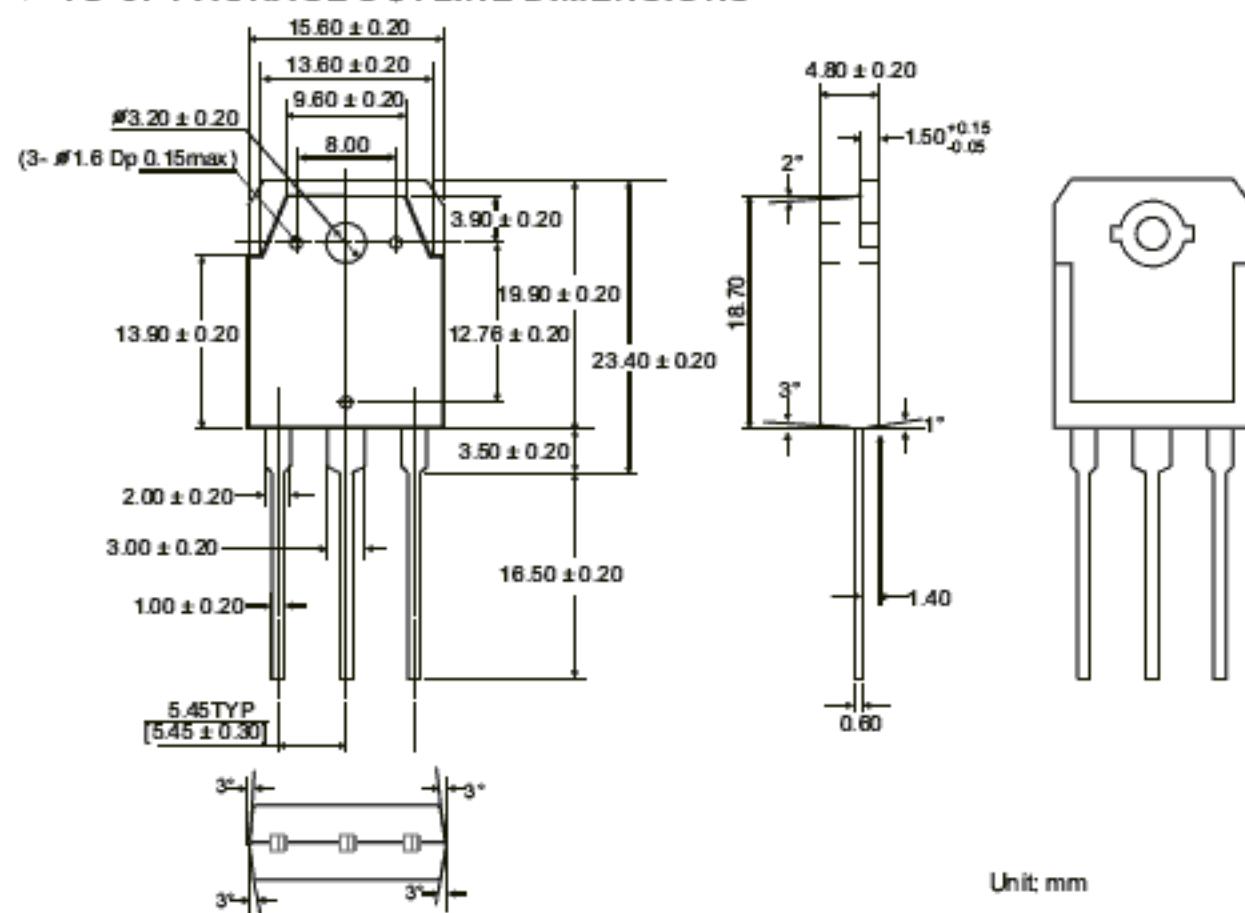
◆ TO-220AB PACKAGE OUTLINE DIMENSIONS



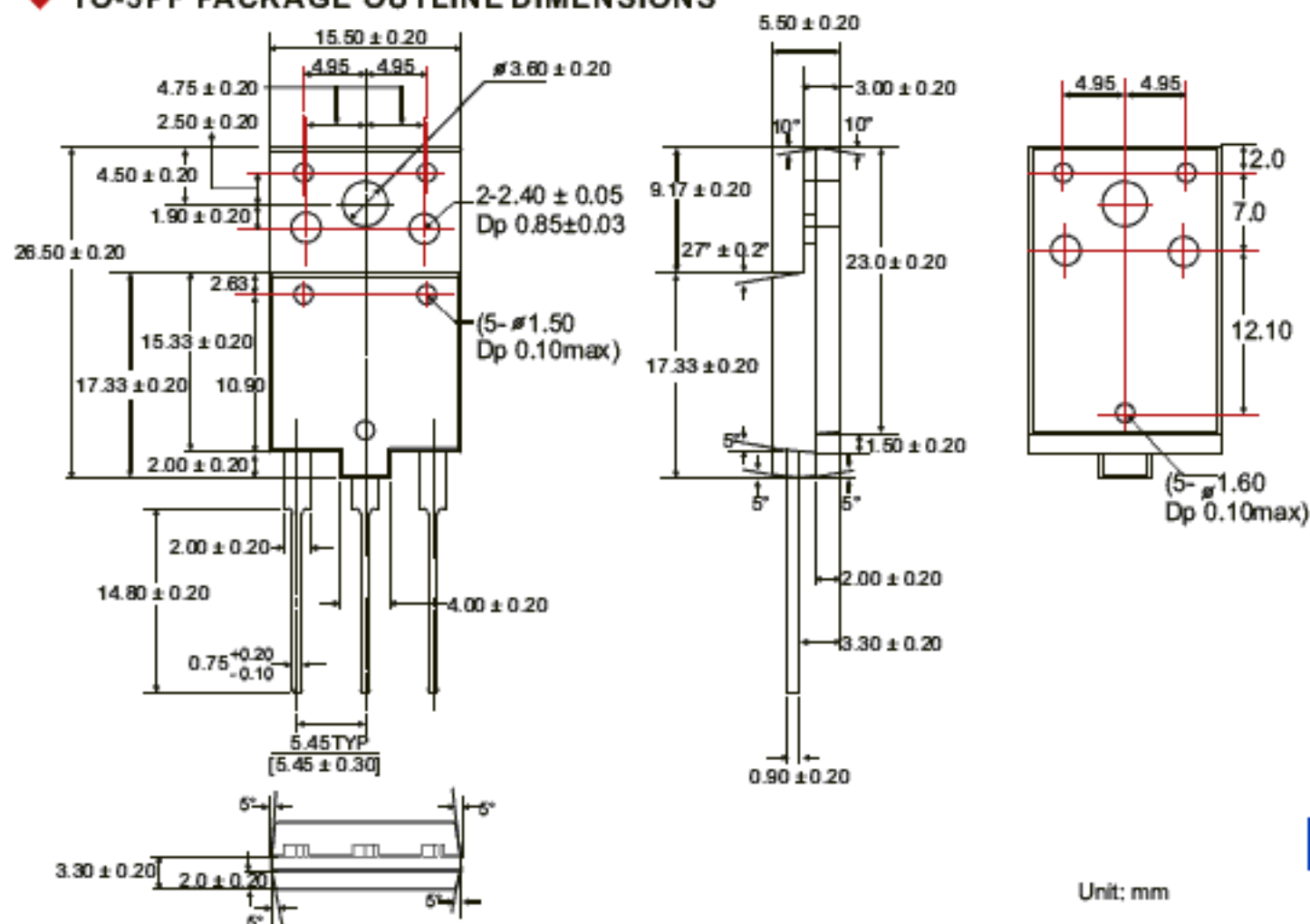
◆ TO-220FPAB PACKAGE OUTLINE DIMENSIONS



◆ TO-3P PACKAGE OUTLINE DIMENSIONS



◆ TO-3PF PACKAGE OUTLINE DIMENSIONS



◆ ORDERING NUMBER

