

Description

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

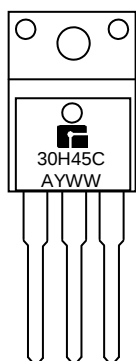
Features

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

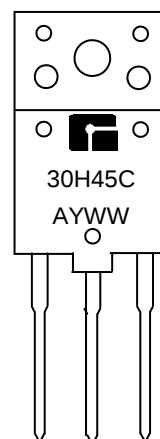
Applications

- Switching Power Supply
- Industrial Application
- Computer and Peripheral
- Home Appliance
- Consumer Product
- Battery Charger/Adapter
- LCD Monitor/TV
- AC-DC Converter
- DC-DC Converter
- Telecommunication
- Free Wheeling Diodes
- Polarity Protection

Marking Information and Pin Configurations (Top View)



TO - 220FPAB & TO - 220AB



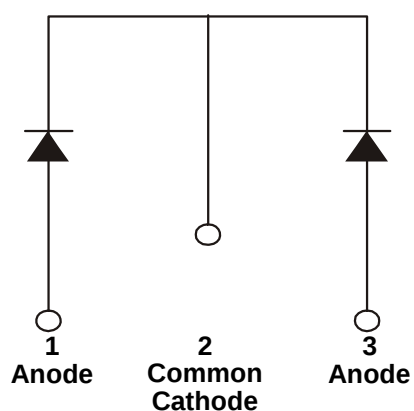
TO - 3P

30: Maximum average forward rectified current - 30A
H: Low V_F family
45: Repetitive peak reverse voltage - 45V
C: Dual Cathode Common
A: Assembly Location
Y: Year
WW: Work Week

Ordering Information

ORDERING NUMBER	PACKAGE	SHIPPING
GMR30H45CTB3T	TO220AB	50 Units/ Tube
GMR30H45CTBF3T	TO220FPAB	50 Units/ Tube
GMR30H45CTP3T	TO-3P	30 Units/ Tube

Block Diagram



Absolute Maximum Ratings

PARAMETER	SYMBOL	VALUE	UNITS
Repetitive Peak Reverse Voltage	V_{RPM}	45	V
RMS Forward Current	$I_{F(RMS)}$	30	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	135	A
Maximum Operating Junction Temperature	T_J	175	°C
Operating storage temperature	T_{STG}	-45 to +150	°C
Voltage Rate of Change	dV/dt	10,000	V/ μ s
Electrostatic Discharge Voltage. JEDEC Method. ESD HBM. Contact	V_{ESD}	± 8	kV

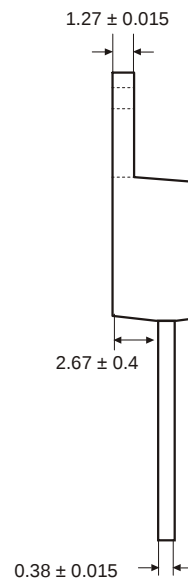
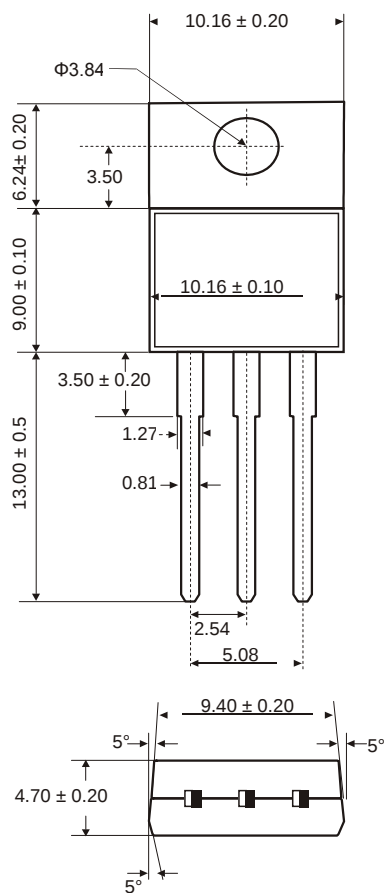
Thermal Characteristics

PARAMETER	SYMBOL	TO220AB	TO220FPAB	TO-3PF	UNITS
Typical thermal resistance	Θ_{JC}	2.4	4.2	1.2	°C/W

Electrical Characteristics (per diode) $T_J = 25^\circ\text{C}$, Unless otherwise noted

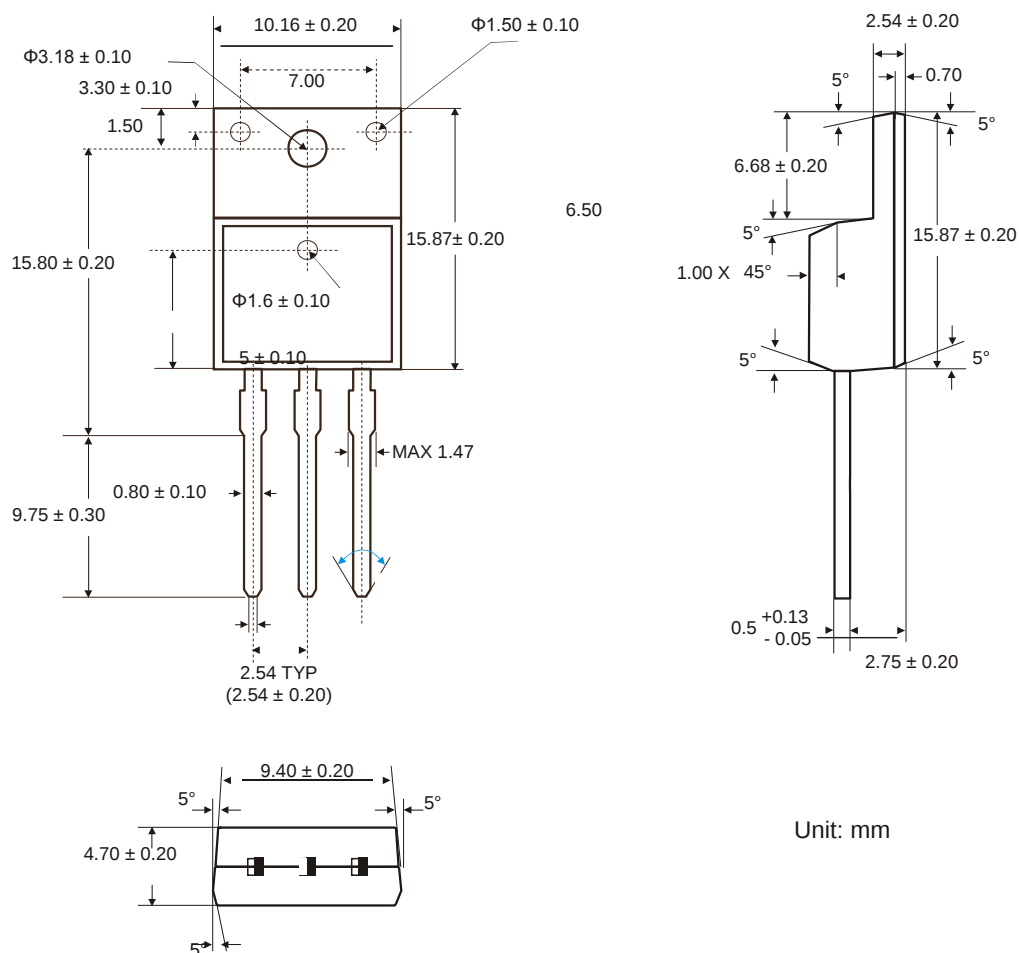
PARAMETER	SYMBOL	Test Condition	Min	Typ	Max	Units
DC Forward Voltage	V_F	$I_F = 15\text{A}$		0.68	0.70	V
Average Rectified Forward Current	$I_{F(AV)}$				10.0	A
Maximum Reverse Current	I_R	$V_R = 45\text{V}$	-	-	10	μA
		$V_R = 45\text{V}, T_J = 125^\circ\text{C}$		-	10	mA

Package Outline Dimensions – TO220AB



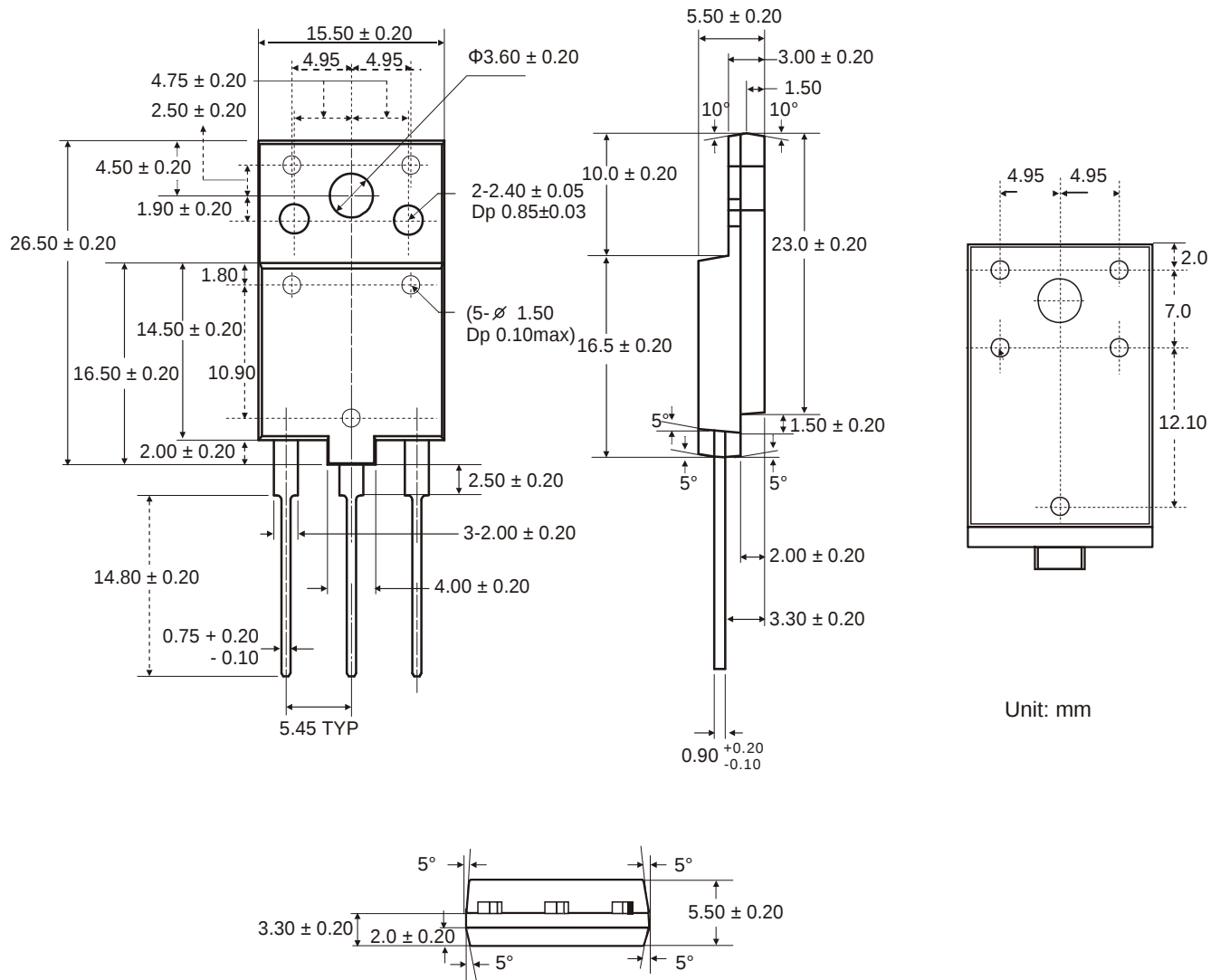
Unit: mm

Package Outline Dimensions – TO220FPAB



Unit: mm

Package Outline Dimensions – TO-3P



Ordering Number

GM

APM
Gamma
Micro

R

Circuit
Type:
Rectifier

30

Rated
Current
30A

H

Low V_F
Family

45

Rated
Voltage
45V

C

Dual
Cathode
Common

TB3

Package

TB3: TO220AB
TBF3: TO220FPAB
TP3: TO-3P

I

Shipping

T: Tube
R: Tape & Reel