



GMR10H60C

HIGH VOLTAGE POWER SCHOTTKY RECTIFIER

Power Discrete

DESCRIPTION

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

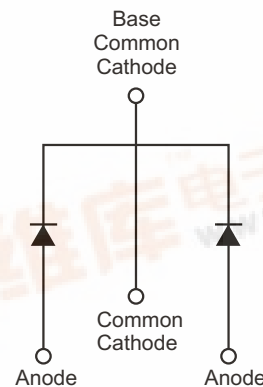
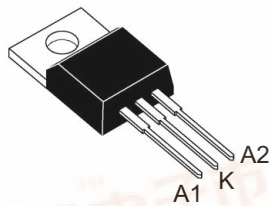
Major Ratings and Characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular waveform	2 X 5	A
V_{RRM}	60	V
V_F @5 Apk, $T_C = 125^\circ\text{C}$ (per leg)	0.60	V
T_J range	-45 ~ +150	$^\circ\text{C}$

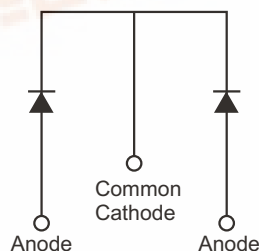
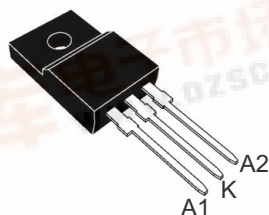
FEATURES

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

TO-220AB



TO-220FPAB



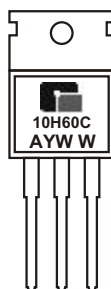
Revision 1, Mar. 2004

GMR10H60C



◆ MARKING INFORMATION

TO - 220AB



A : Assemble Location
Y : Year
WW : Work Week

◆ ORDERING INFORMATION

Ordering Number	Package	Shipping
GMR10H60CTB3T	TO - 220AB	50 Units/ Tube
GMR10H60CTBF3T	TO - 220FPAB	50 Units/ Tube

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

◆ ABSOLUTE RATINGS

Symbol	Parameter				Value	Unit
V _{RRM}	Repetitive peak reverse voltage				60	V
I _{F(RMS)}	RMS forward current				10	A
I _{F(AV)}	Average forward current $\delta = 0.5$	TO-220AB TO-220FPAB	T _C = 155°C	per diode per device	5 10	A
I _{FSM}	Surge non repetitive forward current		tp = 10 ms sinusoidal		160	A
T _{stg}	Storage temperature range				-45 to + 150	°C
T _J	Maximum operating junction temperature*				150	°C
dV/dt	Critical rate of rise of reverse voltage				10000	V/ μs

* $dP_{tot} \leq 1$ 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	Unit
Typical thermal resistance per leg	$R_{\Theta JC}$	3.0	4.2	$^\circ\text{C/W}$

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 μ 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 ⁽⁴⁾	$I_F = 5\text{A}, T_C = 25^\circ\text{C}$	0.75	V
	$I_F = 5\text{A}, T_C = 125^\circ\text{C}$	0.60	
	$I_F = 10\text{A}, T_C = 25^\circ\text{C}$	0.80	
	$I_F = 10\text{A}, T_C = 125^\circ\text{C}$	0.70	
Maximum reverse current per leg at working peak reverse voltage(Note 4)	I_R	10 10	μA mA

◆ **Typical Performance Characteristics**

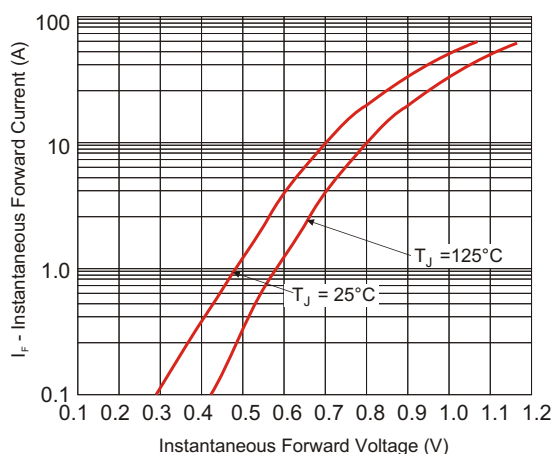
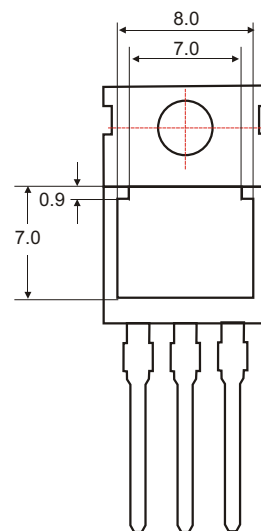
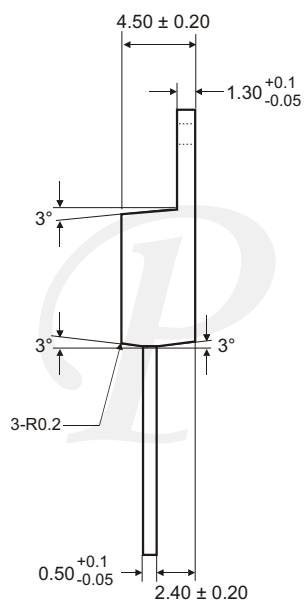
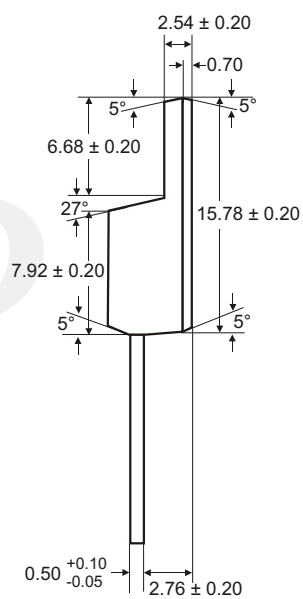
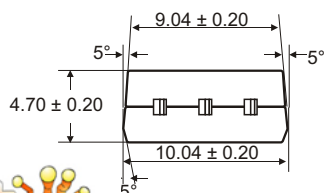


Figure 1. Typical Instantaneous Forward Characteristics

[illegible][illegible]

Unit: mm



◆ ORDERING NUMBER

