

Fast recovery Diodes

(Silicon Epitaxial Planar)

RF □□ 1 series

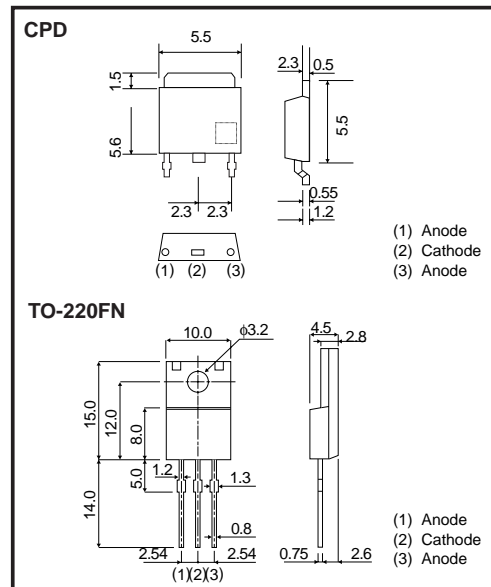
●Applications

High frequency rectification

●Features

- 1) Ultra low V_F very fast recovery
- 2) Fast recovery
- 3) Low switching loss
- 4) Standard package TO-220FN, CPD

●External dimensions (Unit : mm)



TO-220FN Center tap type cathode common, Dual elements

VR Io	Ultra low V_F type FRD		Fast recovery type FRD	
	200V		200V	
	Dual	Single	Dual	Single
6A	●	—	●	—
10A	●	—	●	—
15A	—	—	—	—
16A	●	—	—	—
20A	●	—	—	—
30A	—	—	—	—

CPD Center tap type cathode common, Dual elements

VR Io	Ultra low V_F type FRD		Fast recovery type FRD	
	200V		200V	
	Dual	Single	Dual	Single
3A	—	●	—	●
5A	—	●	—	●
6A	●	—	●	—
10A	—	—	—	—

Diodes

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits									Unit
		RF071M2S	RF101L2S	RF301B2S	RF501B2S	RF601B2D	RF601T2D	RF1001T2D	RF1601T2D	RF2001T2D	
Reverse voltage (repetitive peak)	V _{RM}	200	200	200	200	200	200	200	200	200	V
Reverse voltage (DC)	V _R	200	200	200	200	200	200	200	200	200	V
Average rectified forward current	I _O	0.7 ^{*1}	1.0 ^{*1}	3.0 ^{*1}	5.0 ^{*1}	6.0 ^{*1}	6.0 ^{*1}	10.0 ^{*1}	16.0 ^{*1}	20.0 ^{*1}	A
Forward peak surge current (60Hz・1cyc.)	I _{FSM}	15	20	60	60	60	80	80	80	80	A
Junction temperature	T _j	150	150	150	150	150	150	150	150	150	℃
Storage temperature	T _{stg}	-55 to +150	-55 to +150	-55 to +150	-55 to +150	-55 to +150	-55 to +150	-55 to +150	-55 to +150	-55 to +150	℃

* Mounting on glass epoxi board

●Electrical characteristics (Ta=25°C)

Part No.	IO	VR	VF			IR		trr		Configure	Package
			Max.	Typ.	IF	Max.	Typ.	Max.	Typ.		
RF071M2S	0.7A	200V	0.850V	0.790V	0.7A	10μA	10nA	25ns	12ns	Single	PMDU
RF101L2S	1A	200V	0.870V	0.815V	1A	10μA	10nA	25ns	12ns	Single	PMDS
RF301B2S	3A	200V	0.930V	0.870V	3A	10μA	10nA	25ns	14ns	Cathode common	CPD(D-pack)
RF501B2S	5A	200V	0.930V	0.870V	5A	10μA	10nA	30ns	15ns	Single	CPD(D-pack)
RF601B2D	6A	200V	0.930V	0.870V	3A	10μA	10nA	25ns	14ns	Cathode common	CPD(D-pack)
RF601T2D	6A	200V	0.930V	0.870V	3A	10μA	10nA	25ns	14ns	Cathode common	TO-220FN
RF1001T2D	10A	200V	0.930V	0.870V	5A	10μA	10nA	30ns	15ns	Cathode common	TO-220FN
RF1601T2D	16A	200V	0.930V	0.870V	8A	10μA	10nA	30ns	18ns	Cathode common	TO-220FN
RF2001T2D	20A	200V	0.930V	0.870V	10A	10μA	10nA	30ns	20ns	Cathode common	TO-220FN

Notes

- No technical content pages of this document may be reproduced in any form or transmitted by any means without prior permission of ROHM CO.,LTD.
- The contents described herein are subject to change without notice. The specifications for the product described in this document are for reference only. Upon actual use, therefore, please request that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard use and operation. Please pay careful attention to the peripheral conditions when designing circuits and deciding upon circuit constants in the set.
- Any data, including, but not limited to application circuit diagrams information, described herein are intended only as illustrations of such devices and not as the specifications for such devices. ROHM CO.,LTD. disclaims any warranty that any use of such devices shall be free from infringement of any third party's intellectual property rights or other proprietary rights, and further, assumes no liability of whatsoever nature in the event of any such infringement, or arising from or connected with or related to the use of such devices.
- Upon the sale of any such devices, other than for buyer's right to use such devices itself, resell or otherwise dispose of the same, no express or implied right or license to practice or commercially exploit any intellectual property rights or other proprietary rights owned or controlled by
- ROHM CO., LTD. is granted to any such buyer.
- Products listed in this document use silicon as a basic material.
Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

About Export Control Order in Japan

Products described herein are the objects of controlled goods in Annex 1 (Item 16) of Export Trade Control Order in Japan.

In case of export from Japan, please confirm if it applies to "objective" criteria or an "informed" (by MITI clause) on the basis of "catch all controls for Non-Proliferation of Weapons of Mass Destruction.