

Diodes

# Fast recovery Diodes (Silicon Epitaxial Planar)

## RF □□ 1 series

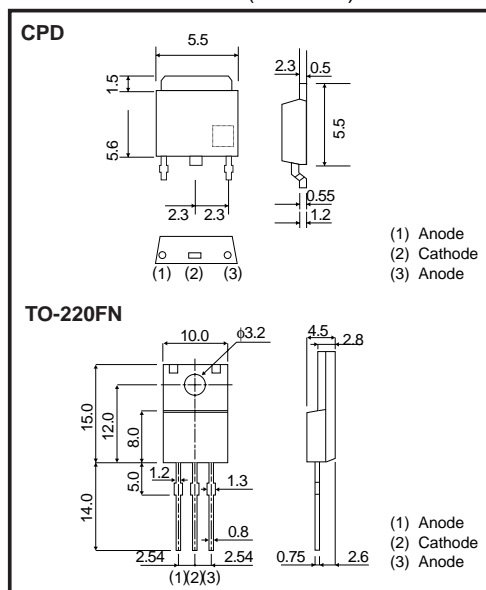
●Applications

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



I <sub>o</sub> \ V <sub>R</sub>	Ultra low V <sub>F</sub> 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



I <sub>o</sub> \ V <sub>R</sub>	Ultra low V <sub>F</sub> 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 <sub>RM</sub>	200	200	200	200	200	200	200	200	200	V
Reverse voltage (DC)	V <sub>R</sub>	200	200	200	200	200	200	200	200	200	V
Average rectified forward current	I <sub>o</sub>	0.7 <sup>*1</sup>	1.0 <sup>*1</sup>	3.0 <sup>*1</sup>	5.0 <sup>*1</sup>	6.0 <sup>*1</sup>	6.0 <sup>*1</sup>	10.0 <sup>*1</sup>	16.0 <sup>*1</sup>	20.0 <sup>*1</sup>	A
Forward peak surge current (60Hz · 1cyc.)	I <sub>FSM</sub>	15	20	60	60	60	80	80	80	80	A
Junction temperature	T <sub>j</sub>	150	150	150	150	150	150	150	150	150	°C
Storage temperature	T <sub>sig</sub>	-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	°C

\* Mounting on glass epoxy board

## ●Electrical characteristics (Ta=25°C)

Part No.	IO	VR	VF			IR		trr		Configurate	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

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