

CR8U-02FP  
CR8U-04FP  
CR8U-08FP

**ULTRA FAST RECOVERY RECTIFIERS  
8.0 AMP, 200 THRU 800 VOLT**



**TO-220FP-2 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CR8U-02FP series are silicon Ultra Fast Recovery rectifiers designed for ultra fast switching applications requiring a low forward voltage drop.

**MARKING: FULL PART NUMBER**

**FEATURES:**

- High reliability
- High current capability
- UL flammability classification 94V-O
- Ultra fast recovery time
- Low forward voltage
- High surge capacity
- High voltage

**MAXIMUM RATINGS:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

	SYMBOL	CR8U-02FP	CR8U-04FP	CR8U-08FP	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	800	V
DC Blocking Voltage	$V_R$	200	400	800	V
RMS Reverse Voltage	$V_R(\text{RMS})$	140	280	560	V
Average Forward Current ( $T_C=100^\circ\text{C}$ )	$I_O$		8.0		A
Peak Forward Surge Current ( $t_p=8.3\text{ms}$ )	$I_{FSM}$		125		A
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$
Typical Thermal Resistance	$\theta_{JA}$		15		$^\circ\text{C/W}$
Typical Thermal Resistance	$\theta_{JC}$		4.2		$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_C=25^\circ\text{C}$  unless otherwise noted)

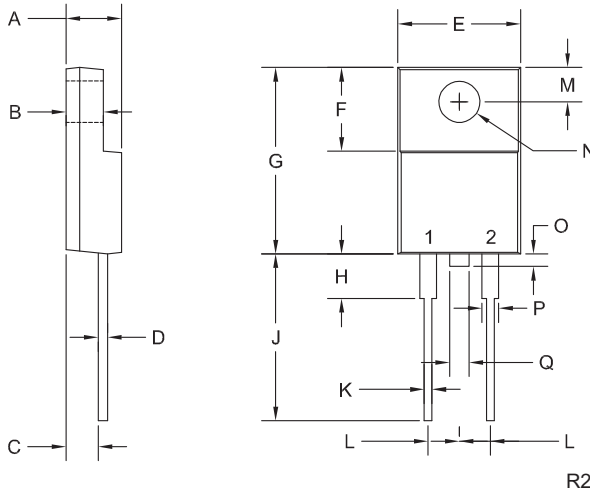
SYMBOL	TEST CONDITIONS	CR8U-02FP		CR8U-04FP		CR8U-08FP		UNITS
		TYP	MAX	TYP	MAX	TYP	MAX	
$I_R$	$V_R=\text{Rated } V_{RRM}$	-	5.0	-	10	-	10	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_C=150^\circ\text{C}$	-	250	-	500	-	500	$\mu\text{A}$
$V_F$	$I_F=8.0\text{A}$	-	0.975	-	1.3	-	1.5	V
$V_F$	$I_F=8.0\text{A}, T_C=150^\circ\text{C}$	-	0.895	-	1.1	-	1.2	V
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	-	30	-	30	-	90	ns
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	80	-	80	-	50	-	pF

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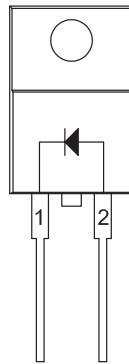


TO-220FP-2 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	-	0.189	-	4.80
B	-	0.123	-	3.12
C	0.098	0.114	2.50	2.90
D	-	0.032	-	0.81
E	-	0.406	-	10.31
F	0.248	0.272	6.30	6.90
G	0.583	0.606	14.80	15.40
H	-	0.161	-	4.10
J	0.512	0.543	13.00	13.80
K	-	0.035	-	0.90
L	0.100		2.55	
M	0.100	0.112	2.55	2.85
N (DIA)	0.118	0.134	3.00	3.40
O	-	0.063	-	1.60
P	-	0.055	-	1.40
Q	-	0.071	-	1.80

TO-220FP-2 (REV: R2)



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING:

FULL PART NUMBER

R4 (9-September 2013)