

CR16UD-02FP
CR16UD-04FP
CR16UD-08FP

DUAL, COMMON CATHODE
ULTRA FAST RECOVERY RECTIFIERS
16 AMP, 200 THRU 800 VOLT



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CR16UD-02FP series devices are dual, ultra fast recovery silicon rectifiers designed for ultra fast switching applications requiring a low forward voltage drop.

MARKING: FULL PART NUMBER



TO-220FP CASE

FEATURES:

- High reliability
- High current capability
- UL flammability classification 94V-0
- Ultra fast recovery time
- Low forward voltage
- High surge capacity
- High voltage

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

	SYMBOL	CR16UD-02FP	CR16UD-04FP	CR16UD-08FP	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	200	400	800	V
DC Blocking Voltage	V_R	200	400	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	560	V
Average Forward Current ($T_C=100^\circ\text{C}$)	I_O		16		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	θ_{JA}		30		$^\circ\text{C/W}$
Typical Thermal Resistance	θ_{JC}		3.0		$^\circ\text{C/W}$

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

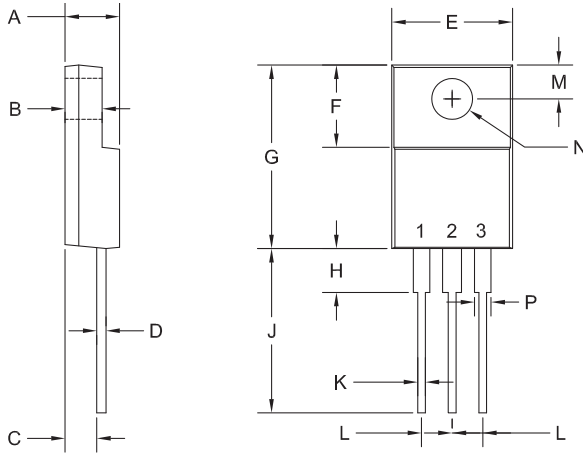
SYMBOL	TEST CONDITIONS	CR16UD-02FP		CR16UD-04FP		CR16UD-08FP		UNITS
		TYP	MAX	TYP	MAX	TYP	MAX	
I_R	$V_R=\text{Rated } V_{RRM}$	-	5.0	-	10	-	10	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=150^\circ\text{C}$	-	250	-	500	-	500	μA
V_F	$I_F=8.0\text{A}$	-	1.0	-	1.3	-	1.7	V
V_F	$I_F=8.0\text{A}, T_C=150^\circ\text{C}$	-	0.895	-	1.1	-	1.2	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	35	50	35	50	95	100	ns
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	170	-	170	-	130	-	pF

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TO-220FP CASE - MECHANICAL OUTLINE

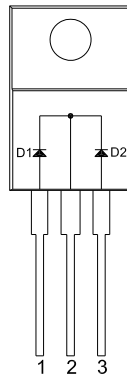


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.165	0.202	4.20	5.12
B	0.090	0.130	2.30	3.30
C	0.098	0.122	2.50	3.10
D	-	0.031	-	0.80
E	0.382	0.418	9.70	10.63
F	0.238	0.276	6.06	7.00
G	0.583	0.640	14.80	16.25
H	-	0.161	-	4.10
J	0.506	0.543	12.85	13.80
K	0.020	0.031	0.50	0.79
L	0.100		2.54	
M	0.120	0.140	3.05	3.55
N (DIA)	0.116	0.134	2.95	3.40
P	0.039	0.058	1.00	1.47

TO-220FP (REV: R4)

R4

PIN CONFIGURATION



LEAD CODE:

- 1) Anode D1
- 2) Cathode D1, D2
- 3) Anode D2

MARKING:

FULL PART NUMBER

R4 (20-May 2015)



OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
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- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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