

CUD3-02

**SURFACE MOUNT
ULTRA FAST RECOVERY
SILICON RECTIFIER
4 AMPS, 200 VOLTS**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CUD3-02 is a Silicon Ultra-Fast Recovery Rectifier designed for surface mount ultra fast switching applications requiring a low forward voltage drop.

MARKING: FULL PART NUMBER

**DPAK
POWER!**



DPAK RECTIFIER CASE

MAXIMUM RATINGS: ($T_C=25^\circ\text{C}$ unless otherwise noted)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
Peak Non Repetitive Surge Reverse Voltage	V_{RSM}	200	V
Average Rectified Forward Current ($T_C=130^\circ\text{C}$)	I_O	4.0	A
Continuous Forward RMS Current	$I_F(\text{RMS})$	10	A
Peak Forward Surge Current, $t_p=10\text{ms}$	I_{FSM}	70	A
Critical Rate of Rise of Reverse Voltage	dv/dt	10,000	V/ μs
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	Θ_{JC}	5.0	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MAX	UNITS
I_R	$V_R=200\text{V}$	20	μA
I_R	$V_R=200\text{V}, T_C=100^\circ\text{C}$	500	μA
V_F	$I_F=12\text{A}$	1.25	V
V_F	$I_F=4.0\text{A}, T_C=100^\circ\text{C}$	0.85	V
t_{rr}	$V_R=30\text{V}, I_F=1.0\text{A}, di/dt=50\text{A}/\mu\text{s}$	35	ns

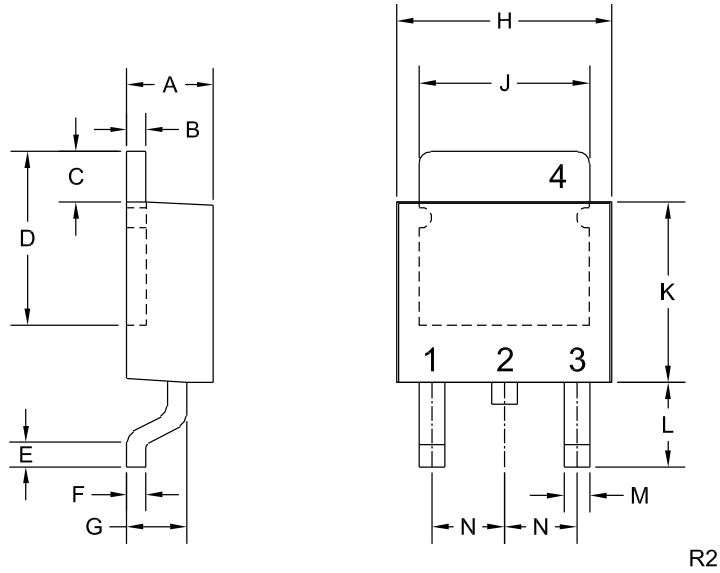
R7 (19-February 2010)

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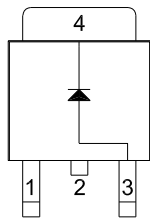
DPAK RECTIFIER CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) No Connection
 - 2) Cathode
 - 3) Anode
 - 4) Cathode
- Pin 2 is Common to the tab (4).

**MARKING:
FULL PART NUMBER**



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.024	0.40	0.60
C	0.063		1.60	
D	0.203	0.219	5.15	5.55
E	0.039		1.00	
F	0.020		0.50	
G	0.051	0.071	1.30	1.80
H	0.248	0.268	6.30	6.80
J	0.197	0.217	5.00	5.50
K	0.209	0.224	5.30	5.70
L	0.090	0.106	2.30	2.70
M	0.012	0.031	0.30	0.80
N	0.091		2.30	

DPAK RECTIFIER (REV: R2)

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