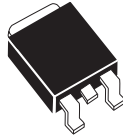


CUD3-02

SURFACE MOUNT
ULTRA FAST RECOVERY
SILICON RECTIFIER
SINGLE, 4.0 AMPS, 200 VOLTS

DPAK
POWER!



DPAK RECTIFIER CASE

CentralTM
Semiconductor Corp.

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 CODE: FULL PART NUMBER

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

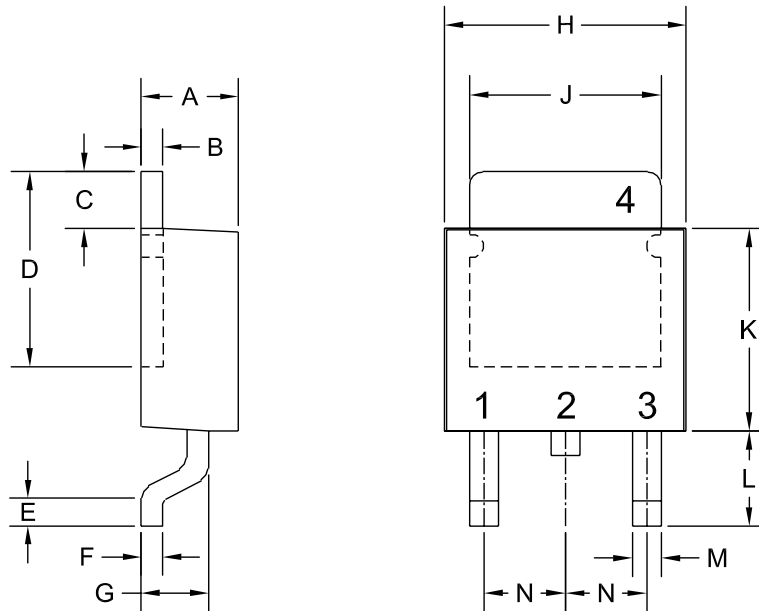
	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
Peak Non Repetitive Surge Reverse Voltage	V_{RSM}	200	V
Average Rectified Forward Current ($T_C=130^\circ\text{C}$)	I_O	4.0	A
RMS Forward Current	$I_F(\text{RMS})$	10	A
Peak Forward Surge Current ($t_p=10\text{ms}$)	I_{FSM}	70	A
Critical Rate 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	MIN	MAX	UNIT
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

**SURFACE MOUNT
ULTRA FAST RECOVERY
SILICON RECTIFIER
SINGLE, 4.0 AMPS, 200 VOLTS**

DPAK RECTIFIER CASE - MECHANICAL OUTLINE



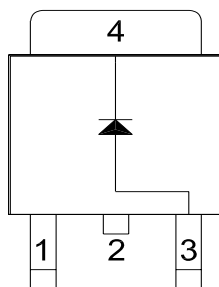
R2

LEAD CODE:

- 1) NO CONNECTION
- 2) CATHODE
- 3) ANODE
- 4) CATHODE

PIN 2 IS COMMON TO THE TAB (4).

MARKING CODE: 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)

R6 (30-September 2005)