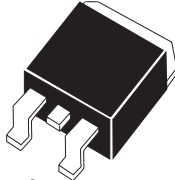


CUDD16-02C
 CUDD16-04C
 CUDD16-08C

ULTRA FAST RECOVERY RECTIFIER
 DUAL, COMMON CATHODE
 16 AMPS, 200 THRU 800 VOLTS



D²PAK CASE

CentralTM
Semiconductor Corp.

FEATURES:

- HIGH RELIABILITY
- LOW FORWARD VOLTAGE
- HIGH CURRENT CAPABILITY
- HIGH SURGE CAPACITY
- UL FLAMMABILITY CLASSIFICATION 94V-0
- SUPERIOR LOT TO LOT CONSISTENCY
- ULTRA FAST RECOVERY TIME
- HIGH VOLTAGE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CUDD16-02C Series types are Silicon Ultra-Fast Recovery Rectifiers designed for surface mount ultra fast switching applications requiring a low forward voltage drop. To order devices on 24mm Tape and Reel (800/13" Reel), add TR13 suffix to part number.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C unless otherwise noted)

	SYMBOL	CUDD16			UNITS
		<u>-02C</u>	<u>-04C</u>	<u>-08C</u>	
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°C)	I _O		16		A
Peak Forward Surge Current (8.3ms)	I _{FSM}		125		A
Operating and Storage					
Junction Temperature	T _J , T _{stg}		-50 to +150		°C
Typical Thermal Resistance	θ _{JC}		3.0		°C/W
Typical Thermal Resistance	θ _{JA}		50		°C/W

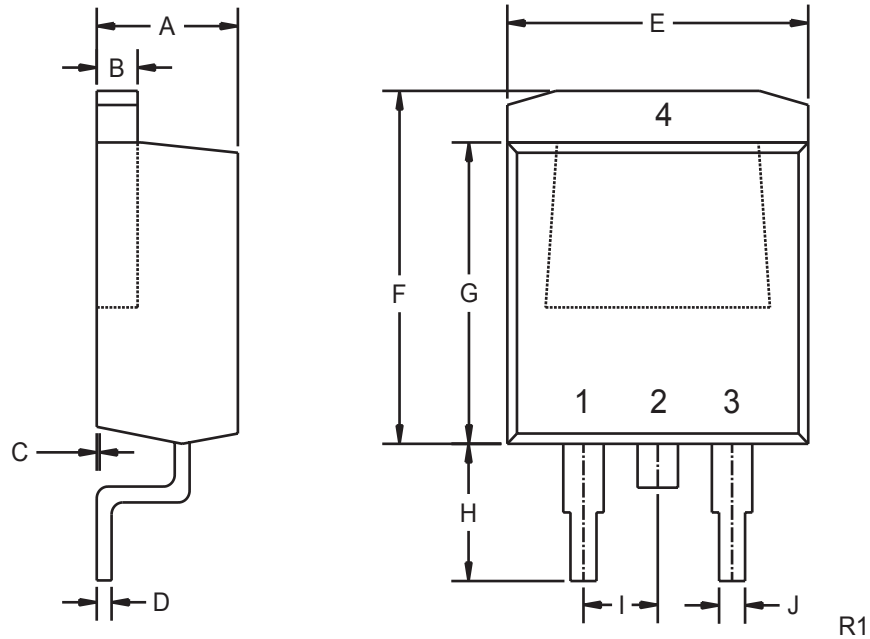
ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	CUDD16-02C		CUDD16-04C		CUDD16-08C		UNITS
		TYP	MAX	TYP	MAX	TYP	MAX	
I _R	V _R =Rated V _{RRM}		5.0		10		10	μA
I _R	V _R =Rated V _{RRM} , T _C = 150°C		250		500		500	μA
V _F	I _F =8.0A		0.975		1.3		1.5	V
V _F	I _F =8.0A, T _C = 150°C		0.895		1.1		1.2	V
t _{rr}	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A		25		25		50	ns
C _J	V _R =4.0V, f=1.0MHz		80		80		50	pF

R1 (26-September 2002)

**ULTRA FAST RECOVERY RECTIFIER
DUAL, COMMON CATHODE
16 AMPS, 200 THRU 800 VOLTS**

D²PAK RECTIFIER CASE - MECHANICAL OUTLINE

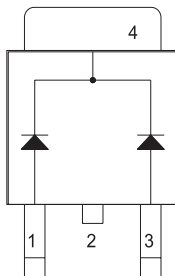


LEAD CODE:

- 1) ANODE # 1
- 2) CATHODE
- 3) ANODE # 2
- 4) CATHODE

PIN 2 IS COMMON TO THE TAB (4)

MARKING CODE: FULL PART NUMBER



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.173	0.189	4.39	4.80
B	0.047	0.055	1.19	1.40
C	± 0.012		± 0.30	
D	0.011	0.026	0.28	0.66
E	0.387	0.409	9.83	10.39
F	0.378	0.418	9.60	10.62
G	0.335	0.357	8.51	9.07
H	0.197	0.236	5.00	5.99
I	0.092	0.108	2.34	2.74
J	-	0.035	-	0.89

D2PAK (REV: R1)