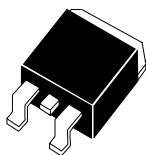




**CUDD8-02**  
**CUDD8-04**  
**CUDD8-08**

**ULTRA FAST RECOVERY RECTIFIERS**  
**SINGLE, 8.0 AMP, 200 THRU 800 VOLTS**



**D²PAK CASE**

**Central**<sup>TM</sup>  
**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 CUDD8-02 Series types are a Silicon Ultra-Fast Recovery Rectifier 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.

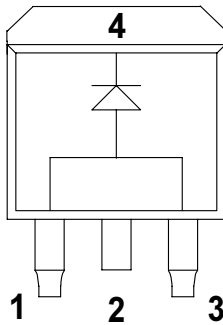
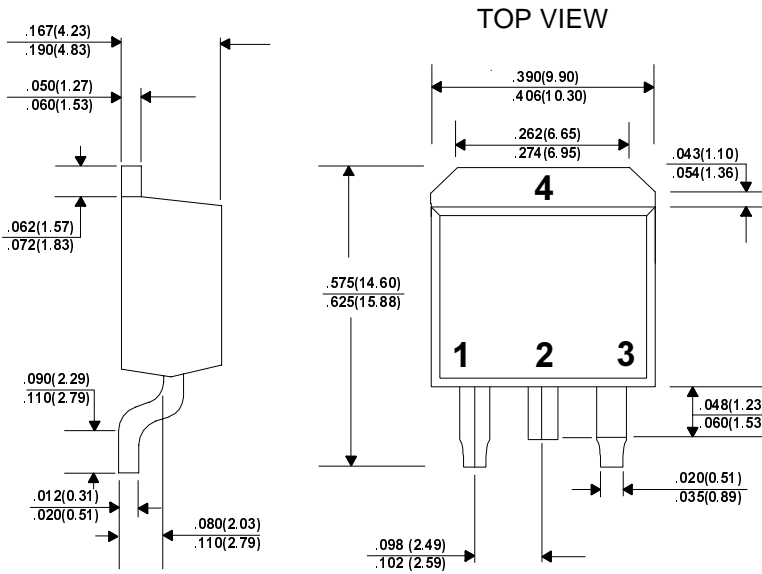
**MAXIMUM RATINGS:** ( $T_C=25^{\circ}\text{C}$  unless otherwise noted)

	SYMBOL	CUDD8-02	CUDD8-04	CUDD8-08	
<b>UNITS</b>					
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 ( $T_C=100^{\circ}\text{C}$ )	$I_O$		8.0		A
Peak Forward Surge Current (8.3ms)	$I_{FSM}$		125		A
Operating and Storage					
Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^{\circ}\text{C}$
Typical Thermal Resistance	$\Theta_{JC}$		3.0		$^{\circ}\text{C/W}$
Typical Thermal Resistance	$\Theta_{JA}$		50		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	CUDD8-02		CUDD8-04		CUDD8-08		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
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$		25		25		50	ns
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$	80		80		50		pF

All Dimensions in Inches (mm).



LEAD CODE:  
 1) ANODE  
 2) CATHODE  
 3) ANODE  
 4) CATHODE

PIN 2 IS COMMON TO THE TAB(4)