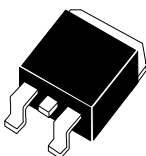




CUDD16-02C
CUDD16-04C
CUDD16-08C

ULTRA FAST RECOVERY RECTIFIERS
DUAL, COMMON CATHODE
16 AMP, 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 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.

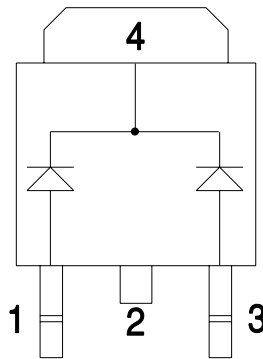
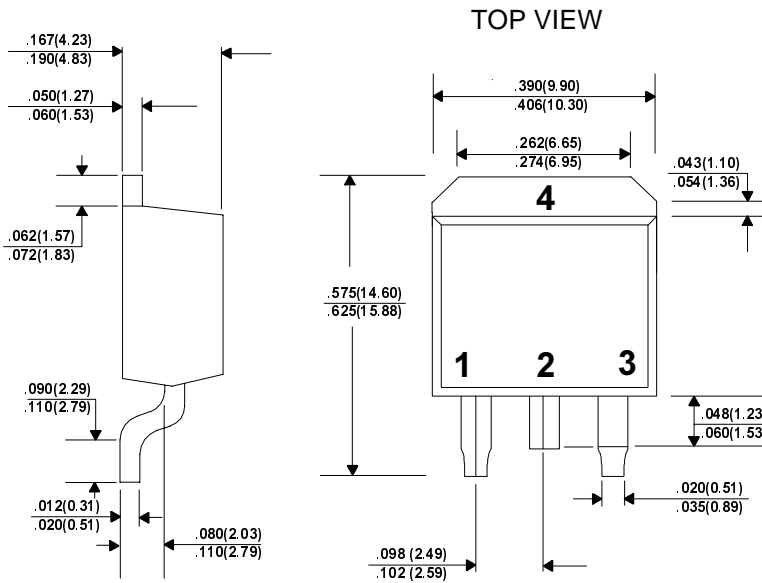
MAXIMUM RATINGS: ($T_C=25^{\circ}\text{C}$ unless otherwise noted)

	SYMBOL	CUDD16 <u>-02C</u>	CUDD16 <u>-04C</u>	CUDD16 <u>-08C</u>	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 (8.3ms)	I_{FSM}		125		A
Operating and Storage					
Junction Temperature	T_J, T_{stg}		-50 to +150		$^{\circ}\text{C}$
Typical Thermal Resistance	Θ_{JC}		3.0		$^{\circ}\text{C/W}$
Typical Thermal Resistance	Θ_{JA}		50		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	CUDD16-02C		CUDD16-04C		CUDD16-08C		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	$I_F=8.0\text{A}$		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#1
- 2) CATHODE
- 3) ANODE #2
- 4) CATHODE

PIN 2 IS COMMON TO THE TAB(4)