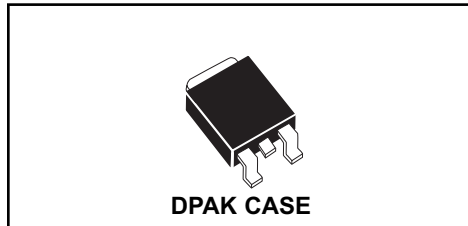


CUD10-02
CUD10-04
CUD10-06
SURFACE MOUNT
ULTRA FAST RECOVERY
SILICON RECTIFIER
SINGLE, 10 AMPS, 200 THRU 600 VOLTS



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 CUD10-02 Series types are a silicon ultra-fast recovery rectifiers designed for surface mount ultra fast switching applications requiring a low forward voltage drop.

MARKING CODE: FULL PART NUMBER

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

	SYMBOL	CUD10-02	CUD10-04	CUD10-06	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	200	400	600	V
DC Blocking Voltage	V_R	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	V
Average Forward Current ($T_C=100^{\circ}\text{C}$)	I_O		10.0		A
Peak Forward Surge Current (8.3ms)	I_{FSM}		100		A
Operating and Storage					
Junction Temperature	T_J, T_{stg}		-65 to +150		$^{\circ}\text{C}$
Typical Thermal Resistance	θ_{JC}		3.0		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	CUD10-02		CUD10-04		CUD10-06		UNITS
		TYP	MAX	TYP	MAX	TYP	MAX	
I_R	$V_R=\text{Rated } V_{RRM}$		10		10		10	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=125^{\circ}\text{C}$		500		500		500	μA
V_F	$I_F=10\text{A}$		0.95		1.30		1.70	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$		35		35		35	ns
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	62		62		62		pF

R1 (30-September 2005)

DPAK RECTIFIER CASE - MECHANICAL OUTLINE

