

CR70U-010 SERIES**70 AMP ULTRA FAST
RECOVERY SILICON RECTIFIER
100 THRU 800 VOLTS****DO-5 CASE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CR70U-010 Series types are 70 Amp stud mounted ultra fast recovery silicon rectifiers which are high quality, well constructed, highly reliable components designed for use in all types of military, commercial, industrial, entertainment, computer, and automotive applications.

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

	SYMBOL	CR70U						UNITS
		-010	-015	-020	-040	-060	-080	
Peak Repetitive Reverse Voltage	V_{RRM}	100	150	200	400	600	800	V
DC Blocking Voltage	V_R	100	150	200	400	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	105	140	280	420	560	V
Peak Forward Surge Current (8.3ms)	I_{FSM}	1000	1000	1000	800	700	700	A
Average Forward Current, $T_C=120^\circ\text{C}$	I_O				70			A
Operating and Storage Junction Temperature	T_J, T_{stg}				-65 to +175			$^\circ\text{C}$
Thermal Resistance	θ_{JC}				0.8			$^\circ\text{C/W}$

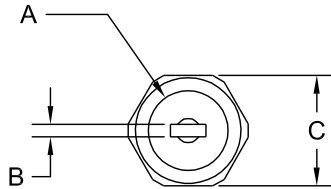
ELECTRICAL CHARACTERISTICS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	CR70U-010		CR70U-020		CR70U-060		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I_R	$V_R=\text{Rated } V_{RRM}$	-	25	-	25	-	25	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=125^\circ\text{C}$	-	3.0	-	3.0	-	3.0	mA
V_F	$I_F=70\text{A}$	-	0.975	-	1.30	-	1.35	V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, \text{Rec. to } 0.25\text{A}$	-	50	-	75	-	100	ns

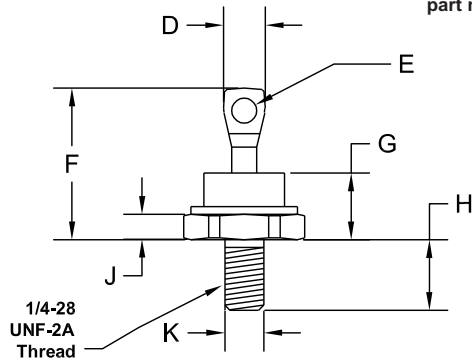
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70 AMP ULTRA FAST
RECOVERY SILICON RECTIFIER
100 THRU 800 VOLTS



DO-5 CASE - MECHANICAL OUTLINE



Note:
 Normal Polarity: Cathode to Stud (Case)
 For Reverse Polarity add "R" Suffix to
 part number (Example: CR70U-040R)



R1

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	-	0.667	-	16.94
B	-	0.080	-	2.03
C	0.667	0.687	16.94	17.45
D	-	0.375	-	9.53
E	0.140	0.175	3.56	4.45
F	-	1.000	-	25.40
G	-	0.450	-	11.43
H	0.422	0.453	10.72	11.51
J	0.115	0.200	2.92	5.08
K	-	0.227	-	5.76

MARKING:
FULL PART NUMBER

DO-5 (REV: R1)

R3 (23-November 2009)