CR70U-010 SERIES

70 AMP ULTRA FAST RECOVERY SILICON RECTIFIER 100 THRU 800 VOLTS

DO-5 CASE

www.centralsemi.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°C unless otherwise noted)

		CR70U						
	SYMBOL	**-010**	**-015**	**-020**	**-040**	**-060**	**-080**	**UNITS**
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°C	I_O			70				A
Operating and Storage Junction Temperature	T_J, T_{stg}			-65 to +175				°C
Thermal Resistance	Θ_{JC}			0.8				°C/W

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

		CR70U-010 **CR70U-015**		**CR70U-020** **CR70U-040**		**CR70U-060** **CR70U-080**		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_R	V_R=Rated V_{RRM}	-	25	-	25	-	25	μA
I_R	V_R=Rated V_{RRM}, T_C=125°C	-	3.0	-	3.0	-	3.0	mA
V_F	I_F=70A	-	0.975	-	1.30	-	1.35	V
t_{rr}	I_F=0.5A, I_R=1.0A, Rec. to 0.25A	-	50	-	75	-	100	ns

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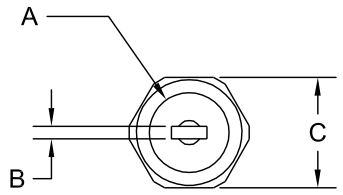
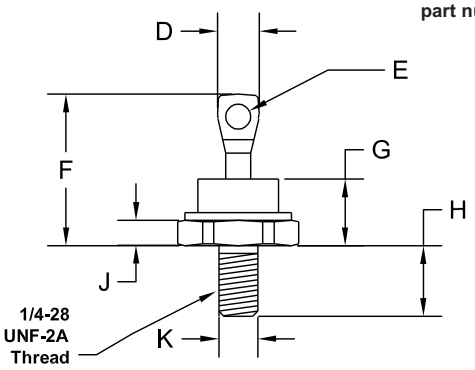
DO-5 CASE - MECHANICAL OUTLINE



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



R1

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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

DO-5 (REV: R1)

MARKING:
FULL PART NUMBER

R3 (23-November 2009)