

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

CR70U-010 SERIES

70 AMP ULTRA FAST
RECOVERY SILICON RECTIFIER
100 THRU 800 VOLTS

JEDEC DO-5 CASE

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.

MAXIMUM RATINGS (T_C = 25°C unless otherwise noted)

			CR70U -010	CR70U -015	CR70U -020	CR70U -040	CR70U -060	CR70U -080	CR70U
	SYMBOL								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	
Average Forward Current (T _C = 120°C)	I _D	70	70	70	70	70	70	A	
Peak Forward Surge Current	I _{FSM}	1000	1000	1000	-	-	-	A	
Peak Forward Surge Current	I _{FSM}	-	-	-	800	-	-	A	
Peak Forward Surge Current	I _{FSM}	-	-	-	-	700	700	A	
Operating and Storage									
Junction Temperature	T _J , T _{stg}				-65 to +175			°C	
Thermal Resistance	Q _{JC}				0.8			°C/W	

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

				CR70U-010	CR70U-020	CR70U-060	
				CR70U-015	CR70U-040	CR70U-080	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX
V _F	I _F = 70A			0.975	1.30	1.35	V
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
t _{rr}	I _F = 0.5A, I _R = 1.0A, Recov to 0.25A			50	75	100	ns

NOTE: Normal Polarity: Cathode to Stud (Case)
For Reverse Polarity add "R" Suffix (Ex: CR70U-040R)