

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CR30U-010 SERIES

30 AMP ULTRA FAST
RECOVERY SILICON RECTIFIER
100 THRU 800 VOLTS

JEDEC DO-4 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CR30U-010 Series types are 30 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)

	SYMBOL	CR30U -010	CR30U -015	CR30U -020	CR30U -040	CR30U -060	CR30U -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
Average Forward Current(T _C = 120°C)	I _O	30	30	30	30	30	30	A
Peak Forward Surge Current	I _{FSM}	500	500	500	-	-	-	A
Peak Forward Surge Current	I _{FSM}	-	-	-	400	-	-	A
Peak Forward Surge Current	I _{FSM}	-	-	-	-	300	300	A
Operating and Storage								
Junction Temperature	T _J , T _{stg}			-65 to +175				°C
Thermal Resistance	θ _{JC}			1.8				°C/W

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

SYMBOL	TEST CONDITIONS	CR30U-010		CR30U-040		CR30U-060		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
V _F	I _F = 30A		0.975		1.20		1.30	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		35		50		75	ns

NOTE: Normal Polarity: Cathode to Stud (Case)
For Reverse Polarity add "R" Suffix (Ex: CR30U-040R)

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

CONTACT US

Corporate Headquarters & Customer Support Team

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