

HyperFast Rectifiers ideal for use with Super Junction MOSFETs

600V | 15A, 30A



The CRU24715-600 and CRU24730-600 are HyperFast recovery diodes / rectifiers in the TO-247 case. They are designed for use with Central's latest Super Junction MOSFETs, including the CDMSJ22029-650 and others. These rectifiers are ideal for high-current switching applications and feature very high recovery speed, with a t_{rr} of 35ns or less.

Features

- High voltage capability
- Dual diode for high current capability
- Low t_{rr} (as low as 30ns)
- Backside pad for thermal efficiency

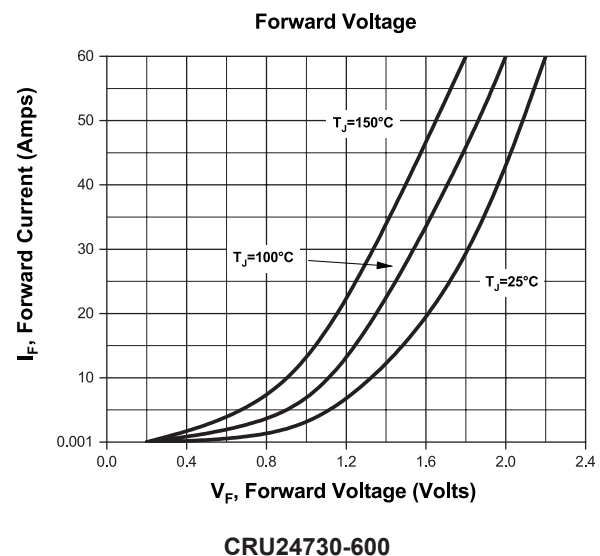
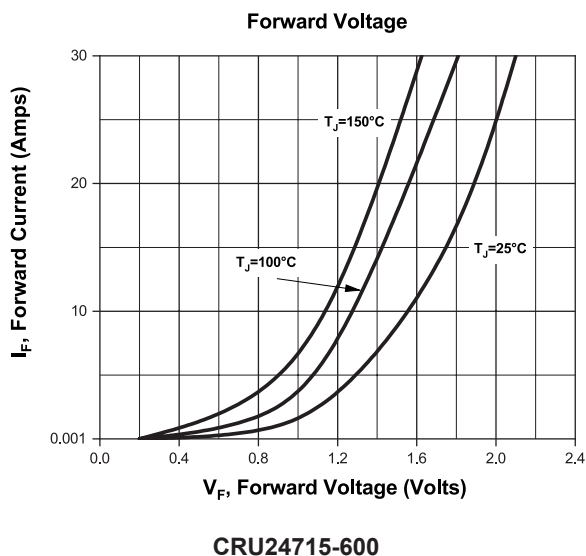
Applications

- Flyback diode for:
- Power Factor Correction (PFC)
 - Continuous Conduction Mode (CCM)
 - Switch Mode Power Supplies (SMPS)

Benefits

- Energy efficiency
- Industry standard package
- Low switching losses

Central Item No.	Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)			Electrical Characteristics: ($T_A = 25^\circ\text{C}$ unless otherwise noted)					Package Type
	V_{RRM} (V) MAX	T_J, T_{stg} ($^\circ\text{C}$) MAX	I_{FSM} (A) MAX	V_F (V) MAX	@ I_F (A)	I_R (μA) MAX	@ V_R (V)	I_o (A)	
CRU24715-600	600	-55 to +150	140	2.3	15	100	600	15A per leg, 30A total	TO-247
CRU24730-600	600	-55 to +150	175	2.5	30	100	600	30A per leg, 60A total	TO-247



SPICE Models and other technical resources:

Visit www.centrasemi.com to download SPICE models for these devices.

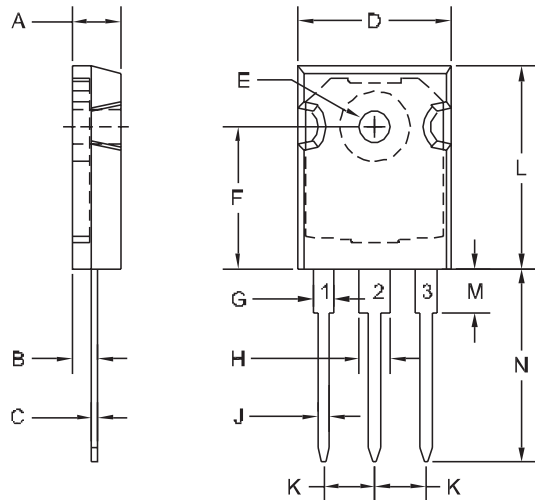
RoHS and REACH compliance declarations

Visit the Quality section of Central's website to access.

HyperFast Rectifiers ideal for use with Super Junction MOSFETs

600V | 15A, 30A

TO-247 Package Details

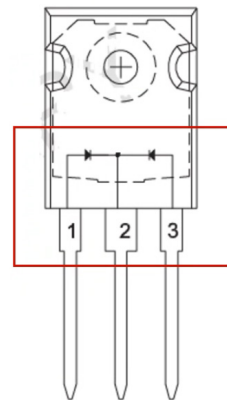


R3

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.184	0.211	4.68	5.36
B	0.087	0.110	2.20	2.80
C	0.019	0.028	0.48	0.70
D	0.606	0.638	15.38	16.20
E (DIA)	0.128	0.144	3.25	3.65
F	0.583	0.607	14.81	15.42
G	0.072	0.097	1.82	2.46
H	0.115	0.127	2.92	3.23
J	0.035	0.060	0.89	1.53
K	0.207	0.223	5.26	5.66
L	0.812	0.881	20.63	22.38
M	0.145	0.177	3.68	4.50
N	0.728	0.846	18.50	21.50

TO-247 (REV: R3)

Dual Cathode Configuration

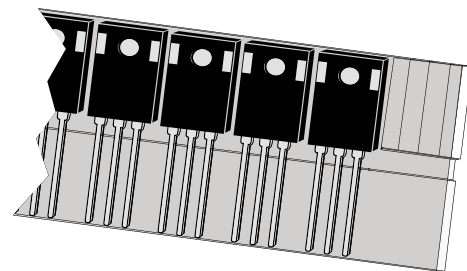


- Dual diodes (common cathode)
- Using diodes in parallel with double rating
- 2x 15A = 30A
- 2x 30A = 60A

Lead Code

- Leg 1** D1 anode
- Leg 2** Common cathode
- Leg 3** D2 anode
- Pad** Common cathode

Packing Options



TO-247 Antistatic Sleeve

Bulk:

White corrugated box with static shielded bags

Bulk packing quantity: 100

Sleeve:

Antistatic coated plastic sleeve (surface resistivity of $>10^9$ and $<10^{13}$ ohms per square)

Sleeve packing quantity: 30

Package Options

Various DFN-style packages possible

For more information on Central's products and potential solutions:

Call us at: **1.631.435.1110**

Or view online: www.centralsemi.com/featured-products

Just Ask