

Product Brief



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

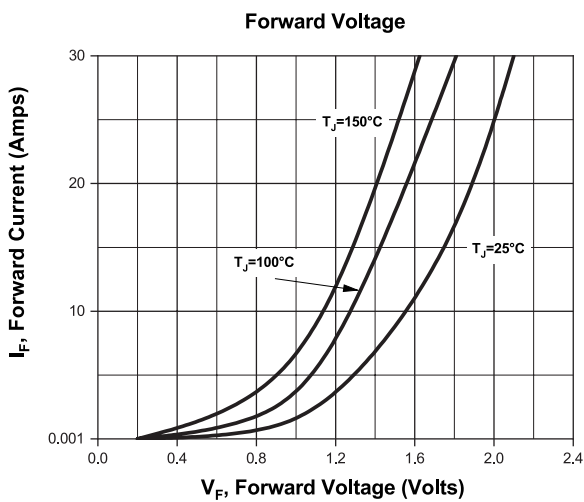
Flyback diode for:

- Power Factor Correction (PFC)
- Continuous Conduction Mode (CCM)
- Switch Mode Power Supplies (SMPS)

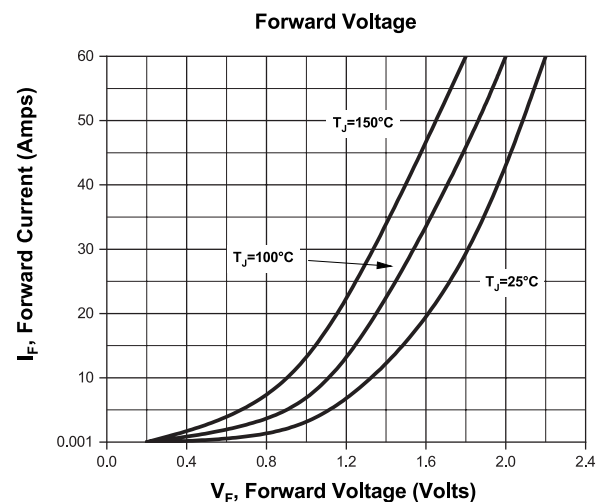
Benefits

- 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



CRU24715-600



CRU24730-600

SPICE Models and other technical resources:

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

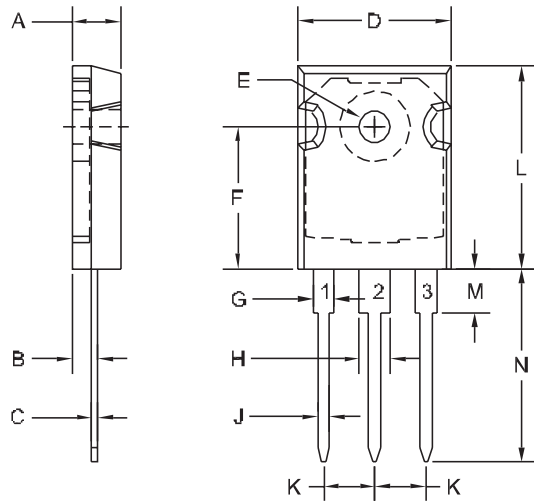
RoHS and REACH compliance declarations

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

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TO-247 Package Details

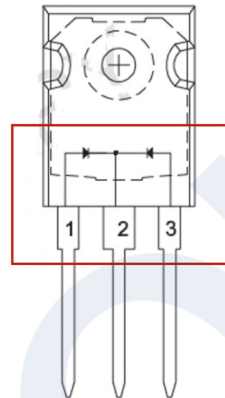


R3

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

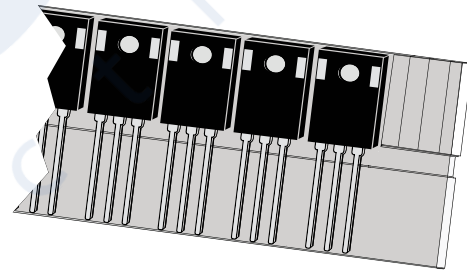


- Dual diodes (common cathode)
- Using diodes in parallel with double rating
- 2x 15A = 30A
- 2x 30A = 60A

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.centrasemi.com/featured-products

Just Ask