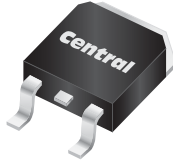


CQDD-25M
CQDD-25N

SURFACE MOUNT
25 AMP SILICON TRIACS
600 THRU 800 VOLT



D²PAK CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CQDD-25M series type is an Epoxy Molded Silicon Triac designed for full wave AC control applications featuring gate triggering in all four (4) quadrants.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T _C =25°C unless otherwise noted)	SYMBOL	CQDD-25M	CQDD-25N	UNITS
Peak Repetitive Off-State Voltage	V _{DRM}	600	800	V
RMS On-State Current (T _C =90°C)	I _{T(RMS)}	25		A
Peak One Cycle Surge, t=8.3ms	I _{TSM}	150		A
I ² t Value for Fusing, t=8.3ms	I ² t	94		A ² s
Peak Gate Power, tp=10µs	P _{GM}	40		W
Average Gate Power Dissipation	P _{G (AV)}	1.0		W
Peak Gate Current, tp=10µs	I _{GM}	10		A
Peak Gate Voltage, tp=10µs	V _{GM}	16		V
Critical Rate of Rise of On-State Current Repetitive, f=60Hz	di/dt	10		A/µs
Operating Junction Temperature	T _J	-40 to +125		°C
Storage Temperature	T _{stg}	-40 to +150		°C
Thermal Resistance	θ _{JA}	60		°C/W
Thermal Resistance	θ _{JC}	1.7		°C/W

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

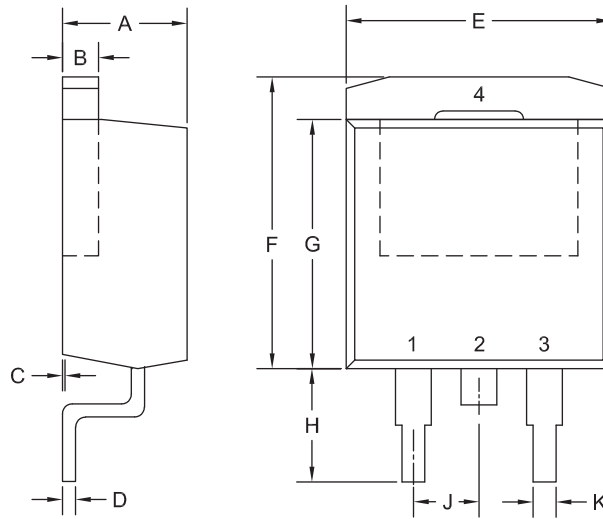
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{DRM}	Rated V _{DRM}			10	µA
I _{DRM}	Rated V _{DRM} , T _C =125°C			2.0	mA
I _{GT}	V _D =12V, R _L =10Ω, QUAD I, II, III		11.1	30	mA
I _{GT}	V _D =12V, R _L =10Ω, QUAD IV		28.2	60	mA
I _H	I _T =100mA		18.4	50	mA
V _{GT}	V _D =12V, R _L =10Ω, QUAD I, II, III		1.03	1.50	V
V _{GT}	V _D =12V, R _L =10Ω, QUAD IV		1.74	2.50	V
V _{TM}	I _{TM} =35A, tp=380µs			1.80	V
dv/dt	V _D = ² / ₃ V _{DRM} , R _{GK} =∞, T _C =125°C	6.0			V/µs

CQDD-25M
CQDD-25N

SURFACE MOUNT
25 AMP SILICON TRIACS
600 THRU 800 VOLT



D²PAK CASE - MECHANICAL OUTLINE



R3

LEAD CODE:

- 1) MT1
- 2) MT2
- 3) Gate
- 4) MT2

MARKING:

FULL PART NUMBER

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.163	0.189	4.14	4.80
B	0.045	0.055	1.14	1.40
C	0.000	0.010	0.00	0.25
D	0.012	0.028	0.30	0.70
E	0.386	0.415	9.80	10.55
F	0.378	0.417	9.60	10.60
G	0.335	0.358	8.50	9.10
H	0.188	0.236	4.78	6.00
J	0.093	0.108	2.35	2.75
K	0.030	0.035	0.75	0.90

D2PAK (REV: R3)

R3 (11-January 2018)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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