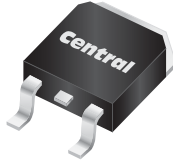


CSDD-25M
CSDD-25N

**SURFACE MOUNT
SILICON CONTROLLED RECTIFIERS
25 AMP, 600 THRU 800 VOLT**



D²PAK CASE



www.centrialsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CSDD-25M series type is an Epoxy Molded Silicon Controlled Rectifier designed for sensing circuit applications and control systems.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_C=25^\circ\text{C}$ unless otherwise noted)		SYMBOL	CSDD-25M	CSDD-25N	UNITS
Peak Repetitive Off-State Voltage		V_{DRM}, V_{RRM}	600	800	V
RMS On-State Current ($T_C=90^\circ\text{C}$)		$I_T(\text{RMS})$	25		A
Peak Non-Repetitive Surge Current, $t=8.3\text{ms}$		I_{TSM}	260		A
Peak Non-Repetitive Surge Current, $t=10\text{ms}$		I_{TSM}	250		A
I^2t Value for Fusing, $t=10\text{ms}$		I^2t	310		A^2s
Peak Gate Power, $t_p=10\mu\text{s}$		P_{GM}	40		W
Average Gate Power Dissipation		$P_{G(AV)}$	1.0		W
Peak Forward Gate Current, $t_p=10\mu\text{s}$		I_{FGM}	4.0		A
Peak Forward Gate Voltage, $t_p=10\mu\text{s}$		V_{FGM}	16		V
Peak Reverse Gate Voltage, $t_p=10\mu\text{s}$		V_{RGM}	5.0		V
Critical Rate of Rise of On-State Current		di/dt	100		$\text{A}/\mu\text{s}$
Operating Junction Temperature		T_J	-40 to +125		$^\circ\text{C}$
Storage Temperature		T_{stg}	-40 to +150		$^\circ\text{C}$
Thermal Resistance		θ_{JA}	60		$^\circ\text{C}/\text{W}$
Thermal Resistance		θ_{JC}	1.3		$^\circ\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}			10	μA
I_{DRM}, I_{RRM}	Rated $V_{DRM}, V_{RRM}, T_C=125^\circ\text{C}$			4.0	mA
I_{GT}	$V_D=12\text{V}, R_L=10\Omega$		4.2	30	mA
I_H	$I_T=100\text{mA}$		12.5	50	mA
V_{GT}	$V_D=12\text{V}, R_L=10\Omega$		0.65	1.50	V
V_{TM}	$I_{TM}=50\text{A}, t_p=380\mu\text{s}$			1.80	V
dv/dt	$V_D=2/3 V_{DRM}, T_C=125^\circ\text{C}$	200			$\text{V}/\mu\text{s}$

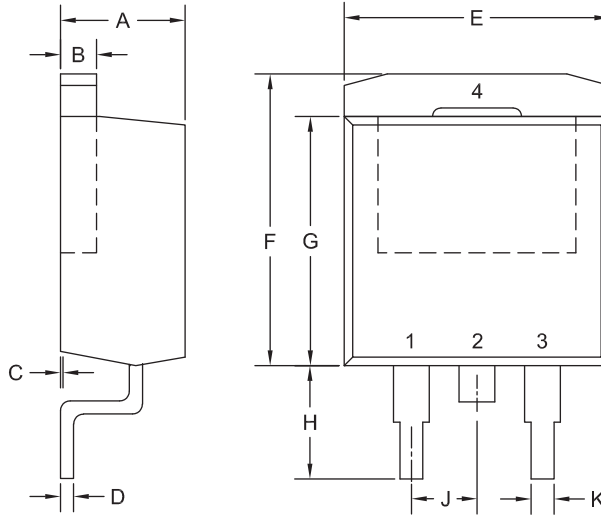
R3 (11-January 2018)

CSDD-25M
CSDD-25N

SURFACE MOUNT
SILICON CONTROLLED RECTIFIERS
25 AMP, 600 THRU 800 VOLT



D²PAK CASE - MECHANICAL OUTLINE



R3

LEAD CODE:

- 1) Cathode
- 2) Anode
- 3) Gate
- 4) Anode

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).

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