CSDD-8M
CSDD-8N

SURFACE MOUNT
SILICON CONTROLLED RECTIFIER
8 AMP, 600 THRU 800 VOLTS



D^2PAK CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CSDD-8M 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°C unless otherwise noted)	**SYMBOL**	**CSDD-8M**	**CSDD-8N**	**UNITS**
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	600	800	V
RMS On-State Current (T_C=90°C)	$I_{T(RMS)}$	8.0		A
Peak One Cycle Surge, t=10ms	I_{TSM}	70		A
I^2t Value for Fusing, t=10ms	I^2t	24		A^2s
Peak Gate Power, tp=10μs	P_{GM}	40		W
Average Gate Power Dissipation	$P_{G(AV)}$	1.0		W
Peak Forward Gate Current, tp=10μs	I_{FGM}	4.0		A
Peak Forward Gate Voltage, tp=10μs	V_{FGM}	16		V
Peak Reverse Gate Voltage, tp=10μs	V_{RGM}	5.0		V
Critical Rate of Rise of On-State Current	di/dt	50		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}	2.5		°C/W

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

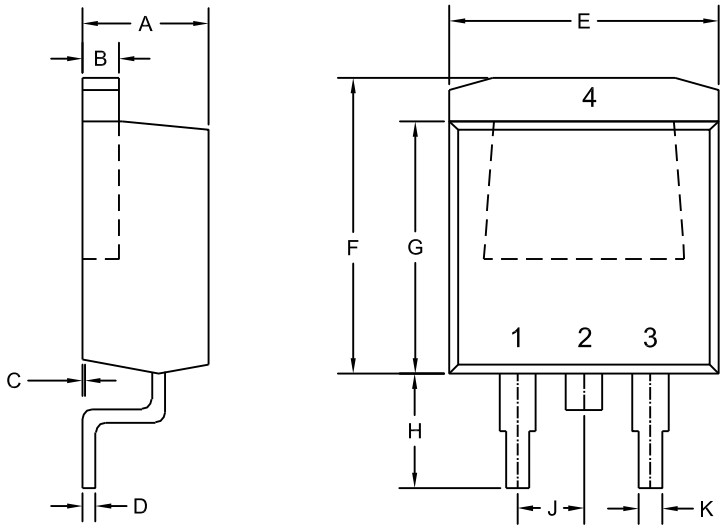
SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}			10	μA
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}, T_C=125°C			2.0	mA
I_{GT}	V_D=12V, R_L=10Ω		3.0	15	mA
I_H	I_T=100mA		7.3	20	mA
V_{GT}	V_D=12V, R_L=10Ω		0.9	1.5	V
V_{TM}	I_{TM}=16A, tp=380μs		1.3	1.8	V
dv/dt	V_D=$^2/_3$ V_{DRM}, T_C=125°C	200			V/μs

R2 (17-February 2010)

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D^2PAK CASE - MECHANICAL OUTLINE



R2

LEAD CODE:
1) Cathode
2) Anode
3) Gate
4) Anode

MARKING:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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	0.409	9.80	10.40
F	0.378	0.417	9.60	10.60
G	0.335	0.358	8.50	9.10
H	0.197	0.236	5.00	6.00
J	0.093	0.108	2.35	2.75
K	0.030	0.035	0.75	0.90

D2PAK (REV: R2)