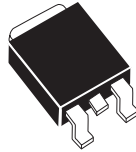


CSD-4M
CSD-4N

4.0 AMP SCR
600 THRU 800 VOLTS



DPAK THYRISTOR CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CSD-4M series type is an Epoxy Molded Silicon Controlled Rectifier designed for sensing circuit applications and control systems.

MARKING CODE: FULL PART NUMBER

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

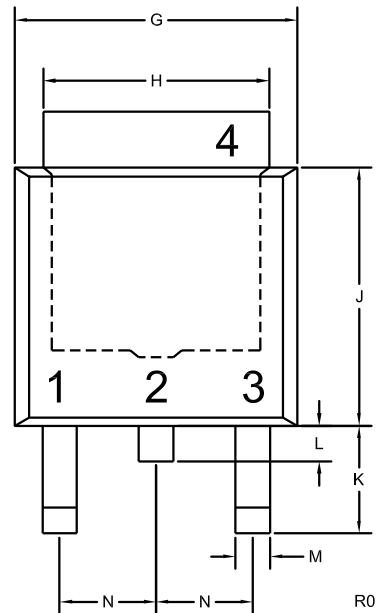
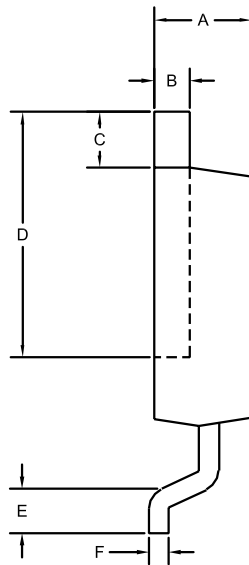
	SYMBOL	CSD -4M	CSD -4N	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	600	800	V
RMS On-State Current ($T_C=85^\circ\text{C}$)	$I_T(\text{RMS})$	4.0		A
Peak One Cycle Surge ($t=10\text{ms}$)	I_{TSM}	30		A
I^2t Value for Fusing ($t=10\text{ms}$)	I^2t	4.5		A^2s
Peak Gate Power ($t_p=20\mu\text{s}$)	P_{GM}	3.0		W
Average Gate Power Dissipation	$P_{G(AV)}$	0.2		W
Peak Gate Current ($t_p=20\mu\text{s}$)	I_{GM}	1.2		A
Critical Rate of Rise of On-State Current	di/dt	50		$\text{A}/\mu\text{s}$
Storage Temperature	T_{stg}	-40 to +150		$^\circ\text{C}$
Junction Temperature	T_J	-40 to +125		$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}, I_{RRM}	Rated $V_{DRM}, V_{RRM}, R_{GK}=1\text{K}\Omega$			10	μA
I_{DRM}, I_{RRM}	Rated $V_{DRM}, V_{RRM}, R_{GK}=1\text{K}\Omega, T_C=125^\circ\text{C}$			200	μA
I_{GT}	$V_D=12\text{V}, R_L=10\Omega$	20	38	200	μA
I_H	$I_T=50\text{mA}, R_{GK}=1\text{K}\Omega$		0.25	2.0	mA
V_{GT}	$V_D=12\text{V}, R_L=10\Omega$		0.55	0.8	V
V_{TM}	$I_{TM}=8.0\text{A}, t_p=380\mu\text{s}$		1.6	1.8	V
dv/dt	$V_D=2/3 V_{DRM}, R_{GK}=1\text{K}\Omega, T_C=125^\circ\text{C}$	10			$\text{V}/\mu\text{s}$

R0 (20-May 2004)

DPAK THYRISTOR CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) CATHODE
- 2) ANODE
- 3) GATE
- 4) ANODE

MARKING CODE:

FULL PART NUMBER

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.086	0.094	2.18	2.39
B	0.018	0.032	0.46	0.81
C	0.035	0.050	0.89	1.27
D	0.205	0.228	5.21	5.79
E	0.047	0.055	1.20	1.40
F	0.018	0.024	0.45	0.60
G	0.250	0.268	6.35	6.81
H	0.205	0.215	5.20	5.46
J	0.235	0.245	5.97	6.22
K	0.100	0.108	2.55	2.74
L	0.025	0.040	0.64	1.02
M	0.025	0.035	0.64	0.89
N	0.090		2.28	

DPAK THYRISTOR (REV: R0)

R0 (20-May 2004)