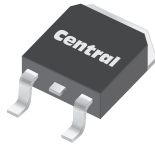


CSD-4M  
CSD-4N

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



**DPAK CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSD-4M and CSD-4N are epoxy molded SCRs designed for sensing circuit and control system applications.

**MARKING: FULL PART NUMBER**

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

	<b>SYMBOL</b>	<b>CSD-4M</b>	<b>CSD-4N</b>	<b>UNITS</b>
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 Current, $t=10\text{ms}$	$I_{TSM}$	30		A
$I^2t$ Value for Fusing, $t=10\text{ms}$	$I^2t$	4.5		$\text{A}^2\text{s}$
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		$\text{A}/\mu\text{s}$
Operating Junction Temperature	$T_J$	-40 to +125		$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 to +150		$^\circ\text{C}$

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

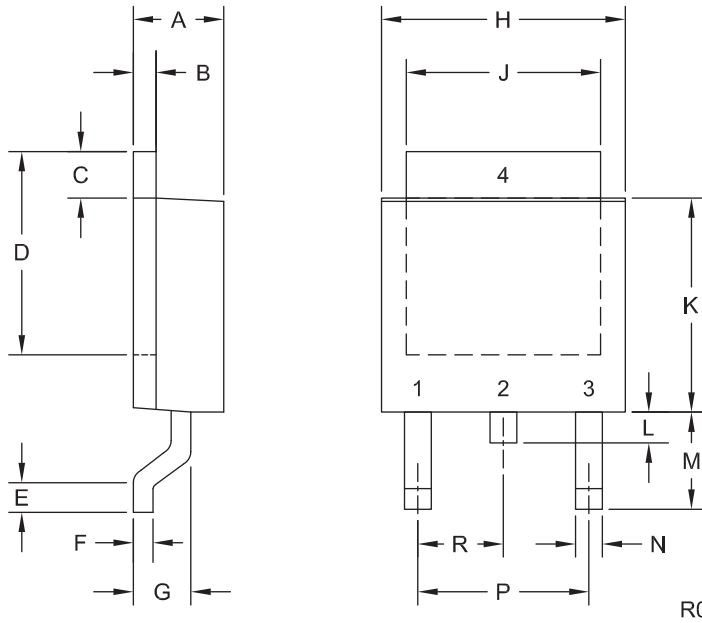
<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_{DRM}, I_{RRM}$	Rated $V_{DRM}, V_{RRM}, R_{GK}=1\text{K}\Omega$			10	$\mu\text{A}$
$I_{DRM}, I_{RRM}$	Rated $V_{DRM}, V_{RRM}, R_{GK}=1\text{K}\Omega, T_C=125^\circ\text{C}$			200	$\mu\text{A}$
$I_{GT}$	$V_D=12\text{V}, R_L=10\Omega$	20	38	200	$\mu\text{A}$
$I_H$	$I_T=50\text{mA}, R_{GK}=1\text{K}\Omega$		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			$\text{V}/\mu\text{s}$

CSD-4M  
CSD-4N



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

**DPAK CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

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

**MARKING:**

**FULL PART NUMBER**

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.083	0.108	2.10	2.75
B	0.016	0.032	0.40	0.81
C	0.035	0.063	0.89	1.60
D	0.203	0.228	5.15	5.79
E	0.020	-	0.51	-
F	0.018	0.024	0.45	0.60
G	0.051	0.071	1.30	1.80
H	0.248	0.268	6.30	6.81
J	0.197	0.217	5.00	5.50
K	0.209	0.245	5.30	6.22
L	0.025	0.040	0.64	1.02
M	0.090	0.115	2.30	2.91
N	0.012	0.045	0.30	1.14
P	0.180		4.60	
R	0.090		2.30	

DPAK (REV: R0)

R2 (21-January 2013)