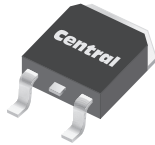


CSD-8M  
CSD-8N

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



**DPAK CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSD-8M and CSD-8N 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-8M</b>	<b>CSD-8N</b>	<b>UNITS</b>
Peak Repetitive Off-State Voltage	$V_{DRM}, V_{RRM}$	600	800	V
RMS On-State Current ( $T_C=90^\circ\text{C}$ )	$I_T(\text{RMS})$		8.0	A
Peak One Cycle Surge, $t=10\text{ms}$	$I_{TSM}$		80	A
$I^2t$ Value for Fusing, $t=10\text{ms}$	$I^2t$		32	$\text{A}^2\text{s}$
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	$di/dt$		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)

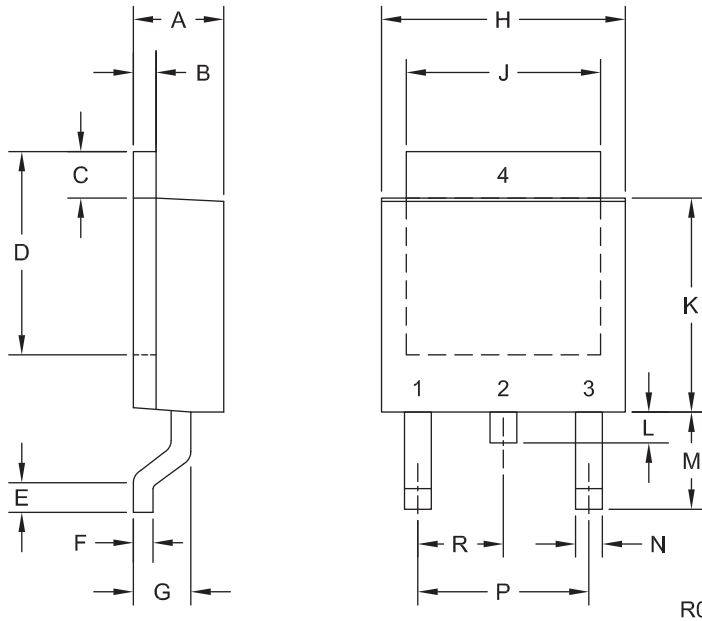
<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_{DRM}, I_{RRM}$	Rated $V_{DRM}, V_{RRM}$			10	$\mu\text{A}$
$I_{DRM}, I_{RRM}$	Rated $V_{DRM}, V_{RRM}, T_C=125^\circ\text{C}$			2.0	$\text{mA}$
$I_{GT}$	$V_D=12\text{V}, R_L=10\Omega$		3.0	15	$\text{mA}$
$I_H$	$I_T=100\text{mA}$		7.3	20	$\text{mA}$
$V_{GT}$	$V_D=12\text{V}, R_L=10\Omega$		0.9	1.5	V
$V_{TM}$	$I_{TM}=16\text{A}, t_p=380\mu\text{s}$		1.3	1.8	V
$dv/dt$	$V_D=2/3 V_{DRM}, T_C=125^\circ\text{C}$	200			$\text{V}/\mu\text{s}$

CSD-8M  
CSD-8N

SURFACE MOUNT  
SILICON CONTROLLED RECTIFIERS  
8.0 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)