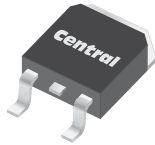


CSD-8M  
CSD-8N

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



**DPAK THYRISTOR CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSD-8M series type is an Epoxy Molded Silicon Controlled Rectifier designed for sensing circuit applications and control systems.

**MARKING: FULL PART NUMBER**

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

	SYMBOL	CSD-8M	CSD-8N	UNITS
Peak Repetitive Off-State Voltage	$V_{DRM}, V_{RRM}$	600	800	V
RMS On-State Current ( $T_C=90^\circ\text{C}$ )	$I_{T(RMS)}$	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)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{DRM}, I_{RRM}$	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	mA
$I_{GT}$	$V_D=12\text{V}, R_L=10\Omega$		3.0	15	mA
$I_H$	$I_T=100\text{mA}$		7.3	20	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			$\text{V}/\mu\text{s}$

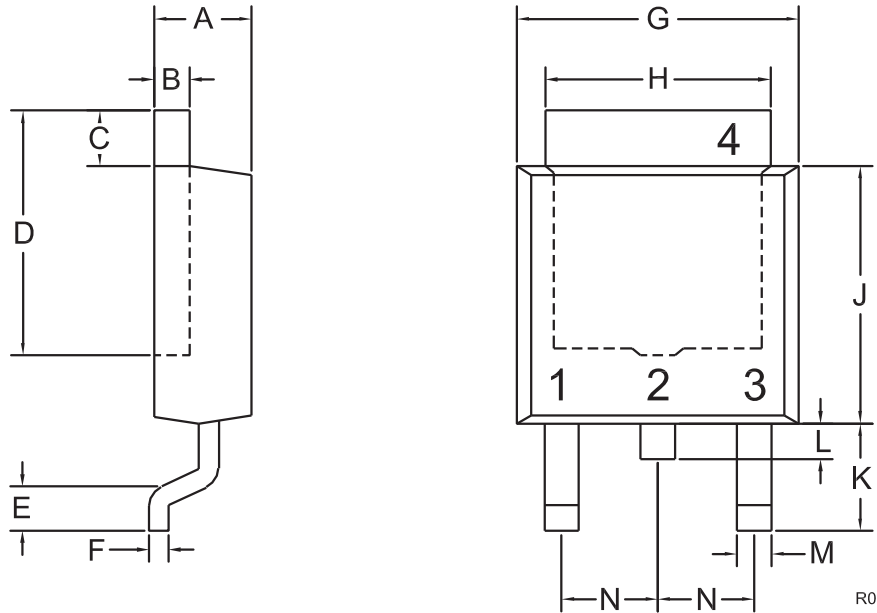
R1 (17-February 2010)

CSD-8M  
CSD-8N

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



DPAK THYRISTOR CASE - MECHANICAL OUTLINE



**LEAD CODE:**

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

**MARKING:**

**FULL PART NUMBER**

SYMBOL	DIMENSIONS			
	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)

R1 (17-February 2010)