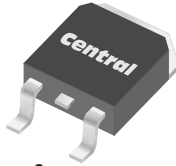


CSDD-16M
CSDD-16N

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



D²PAK CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CSDD-16M 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-16M	CSDD-16N	UNITS
Peak Repetitive Off-State Voltage	V _{DRM} , V _{RRM}	600	800	V
RMS On-State Current (T _C =90°C)	I _{T(RMS)}		16	A
Peak One Cycle Surge, t=10ms	I _{TSM}		160	A
I ² t Value for Fusing, t=10ms	I ² t		128	A ² s
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		100	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}	2.0		°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		3.4	15	mA
I _H	I _T =100mA		8.8	20	mA
V _{GT}	V _D =12V, R _L =10Ω		0.64	1.50	V
V _{TM}	I _{TM} =32A, tp=380µs		1.40	1.60	V
dv/dt	V _D = ² / ₃ V _{DRM} , T _C =125°C	500			V/µs

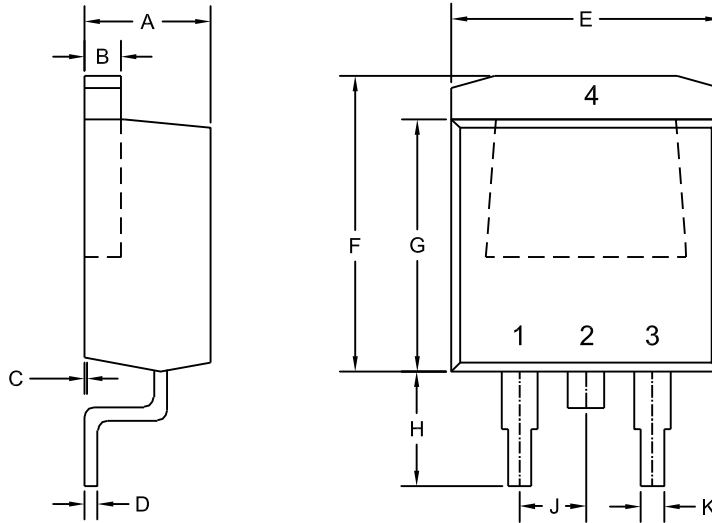
R1 (17-February 2010)

CSDD-16M
CSDD-16N

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



D²PAK CASE - MECHANICAL OUTLINE



R2

LEAD CODE:

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

MARKING:

FULL PART NUMBER

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	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)

R1 (17-February 2010)