CS92B
CS92D
CS92M
CS92N

SILICON CONTROLLED RECTIFIER
0.8 AMP, 200 THRU 800 VOLTS

TO-92 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CS92B 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°C unless otherwise noted)

	SYMBOL	CS92B	CS92D	CS92M	CS92N	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	200	400	600	800	V
RMS On-State Current (T_C=90°C)	$I_{T(RMS)}$		0.8			A
Peak One Cycle Surge (t=10ms)	I_{TSM}		10			A
I^2t Value for Fusing (t=10ms)	I^2t		0.24			A^2s
Peak Gate Power (tp=10µs)	P_{GM}		2.0			W
Average Gate Power Dissipation	$P_{G\ (AV)}$		0.1			W
Peak Gate Current (tp=10µs)	I_{GM}		1.0			A
Peak Gate Voltage (tp=10µs)	V_{GM}		8.0			V
Storage Temperature	T_{stg}		-40 to +150			°C
Junction Temperature	T_J		-40 to +125			°C
Thermal Resistance	Θ_{JA}		200			°C/W
Thermal Resistance	Θ_{JC}		100			°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}, R_{GK}=1KΩ			1.0	µA
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}, R_{GK}=1KΩ, T_C=125°C			100	µA
I_{GT}	V_D=12V			200	µA
I_H	I_T=100mA, R_{GK}=1KΩ			5.0	mA
V_{GT}	V_D=12V			0.8	V
V_{TM}	I_{TM}=1.0A, tp=380µs			1.7	V
dv/dt	V_D=$^2/_3$ V_{DRM}, R_{GK}=1KΩ, T_C=125°C	25			V/µs

R3 (22-April 2004)

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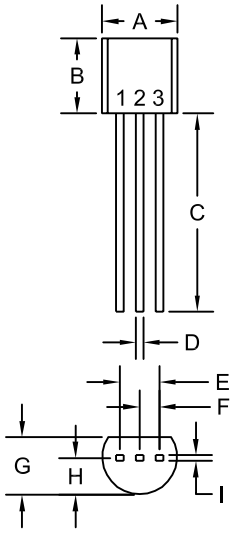
TO-92 CASE - MECHANICAL OUTLINE



R1

LEAD CODE:
1) CATHODE
2) GATE
3) ANODE

MARKING CODE:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

TO-92 (REV: R1)

R3 (22-April 2004)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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