Central Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

CS218-35B
CS218-35D
CS218-35M
CS218-35N
CS218-35P
CS218-35PB

SILICON CONTROLLED RECTIFIER
35 AMP, 200 THRU 1200 VOLTS

TO-218 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR CS218-35B series type is an Epoxy Molded Silicon SCR designed for sensing circuit applications and control systems.

MAXIMUM RATINGS ($T_C = 25°C$ unless otherwise noted)

	SYMBOL	CS218 -35B	CS218 -35D	CS218 -35M	CS218 -35N	CS218 -35P	CS218 -35PB	UNITS
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	200	400	600	800	1000	1200	V
RMS On-State Current ($T_C = 85°C$)	$I_{T(RMS)}$			35				A
Peak One Cycle Surge (t = 10ms)	I_{TSM}			400				A
I^2t Value for Fusing (t = 10ms)	I^2t			800				A^2s
Peak Gate Power (tp = 10μs)	P_{GM}			50				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	V_{RGM}			5.0				V
Critical Rate of Rise of On-State Current	di/dt			100				A/μs
Storage Temperature	T_{stg}			-40 to +150				°C
Junction Temperature	T_J			-40 to +125				°C
Thermal Resistance	Θ_{J-A}			50				°C/W
Thermal Resistance	Θ_{J-C}			0.8				°C/W

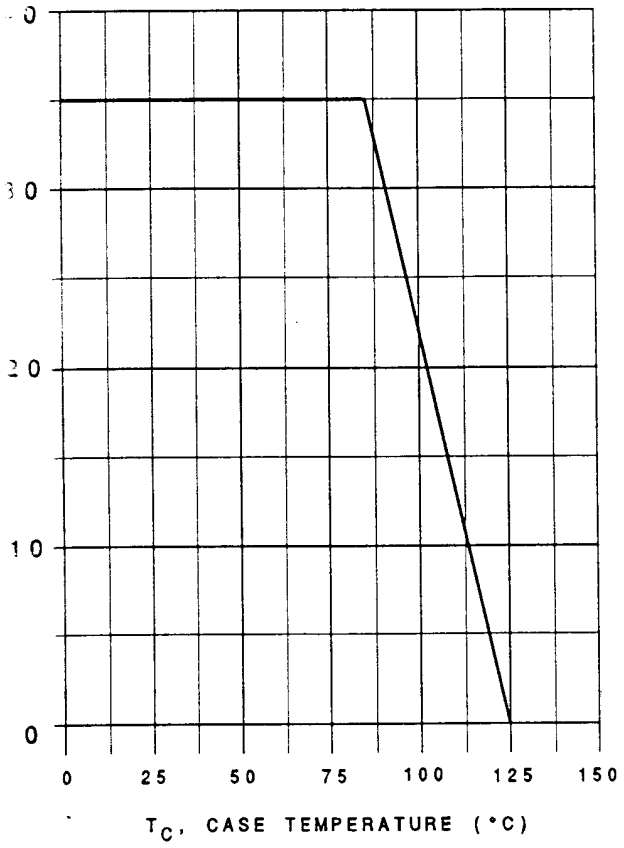
ELECTRICAL CHARACTERISTICS ($T_C = 25°C$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}			0.02	mA
I_{DRM}, I_{RRM}	Rated V_{DRM}, V_{RRM}, $T_C = 125°C$			6.00	mA
I_{GT}	$V_D = 12V$, $R_L = 33\Omega$			50	mA
I_H	$I_T = 500mA$			75	mA
V_{GT}	$V_D = 12V$, $R_L = 33\Omega$			1.50	V
V_{TM}	$I_{TM} = 70A$, tp = 380ms			2.20	V
dv/dt	$V_D = .67 \times V_{DRM}$, $T_C = 125°C$, $V_{DRM} \leq 800V$	500			V/μs
dv/dt	$V_D = .67 \times V_{DRM}$, $T_C = 125°C$, $V_{DRM} \geq 1000V$	250			V/μs

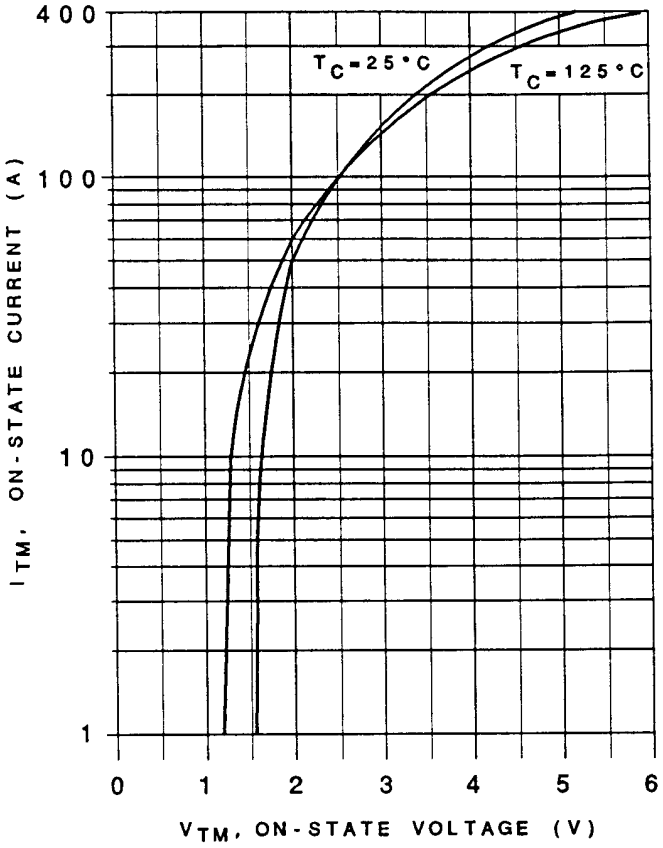
(OVER)

CS218-35B SERIES RATING AND CHARACTERISTIC CURVES

MS ON-STATE CURRENT vs. CASE TEMPERATURE

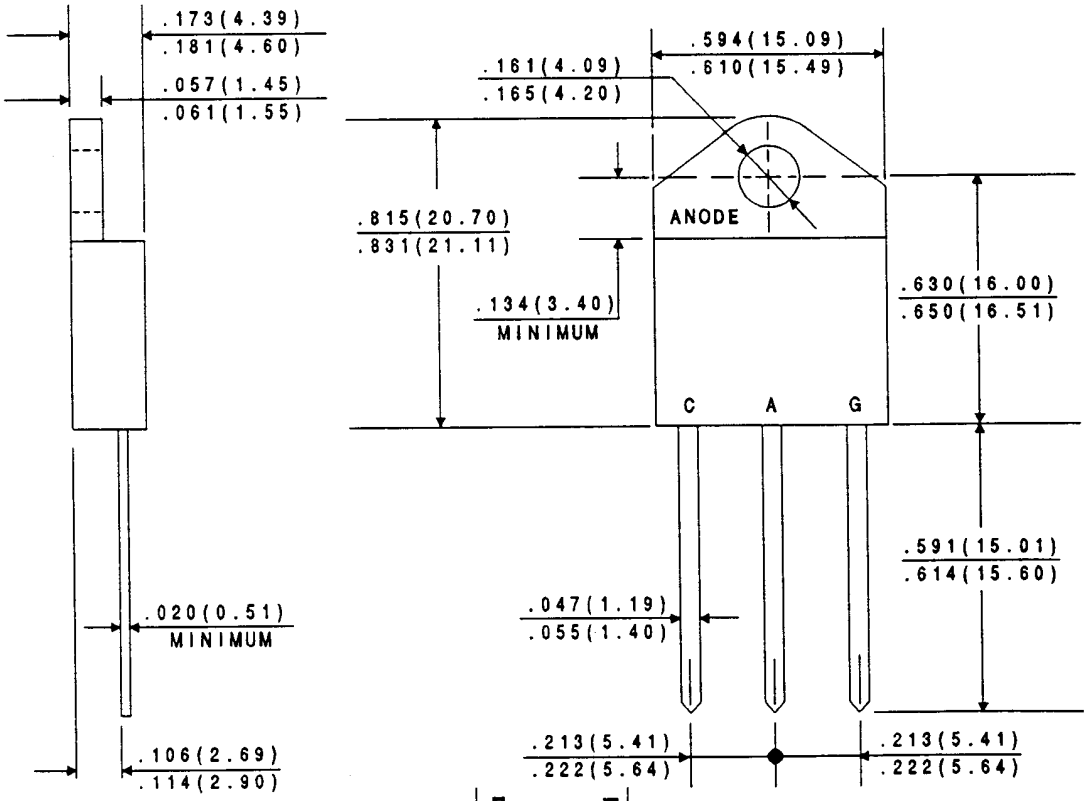


MAXIMUM ON-STATE CHARACTERISTICS



MECHANICAL OUTLINE

ALL DIMENSIONS IN INCHES (mm).



Central Semiconductor Corp.

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

Corporate Headquarters & Customer Support Team

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Worldwide Distributors:
www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms

http://www.centralsemi.com

Product End of Life Notification

PDN ID:	PDN01022 Rev:001
Notification Date:	4/07/17
Last Buy Date:	10/04/16
Last Shipment Date	4/04/17

Summary:All devices manufactured in the TO-218 package are discontinued and now classified as End of Life (EOL). Central is in the process of qualifying replacements for certain TO-218 devices in the TO-247 package; items with planned replacements are shown below. Rev:001 of PDN#01022, April 7, 2017 issued to remove TIP36C and TIP36C SL from the PDN to address market demand. Part numbers TIP36C and TIP36C SL are once again active devices.

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

Central Part Number	Replacement
BDV64	N/A
BDV64A	N/A
BDV64B	N/A
BDV65	N/A
BDV65A	N/A
BDV65B	N/A
BDW83A	N/A
BDW83B	N/A
BDW83C	N/A
BDW84A	N/A
BDW84B	N/A
BDW84C	N/A
BUV47A	N/A
BU426	N/A
CEN1356	N/A
CQ218-45B	N/A
CQ218-45D	N/A
CQ218-45M	N/A
CQ218-45N	N/A
CQ218I-25B	N/A
CQ218I-25D	N/A
CQ218I-25M	N/A
CQ218I-25N	N/A
CQ218I-40B	N/A
CQ218I-40D	N/A
CQ218I-40M	N/A
CQ218I-40N	N/A
CS218-35B	N/A
CS218-35D	N/A
CS218-35M	N/A
CS218-35N	N/A
CS218-35P	N/A
CS218-35PB	N/A
CS218-55B	N/A
CS218-55D	N/A

*** CONTINUED ***

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.

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*** CONTINUED FROM PRIOR PAGE ***

Central Part Number	Replacement	
CS218-55M	N/A	
CS218-55N	N/A	
CS218-55P	N/A	
CS218-55PB	N/A	
CS218I-30B	N/A	
CS218I-30D	N/A	
CS218I-30M	N/A	
CS218I-30N	N/A	
CS218I-30P	N/A	
CS218I-30PB	N/A	
CS218I-50B	N/A	
CS218I-50D	N/A	
CS218I-50M	N/A	
CS218I-50N	N/A	
CS218I-50P	N/A	
CS218I-50PB	N/A	
TIP140	TIP142 TO-247	H
TIP141	TIP142 TO-247	H
TIP142	TIP142 TO-247	H
TIP145	TIP147 TO-247	H
TIP146	TIP147 TO-247	H
TIP147	TIP147 TO-247	H
TIP2955	N/A	
TIP3055	N/A	
TIP33A	TIP35C TO-247	H
TIP33B	TIP35C TO-247	H
TIP33C	TIP35C TO-247	H
TIP34A	TIP36C TO-247	H
TIP34B	TIP36C TO-247	H
TIP34C	TIP36C TO-247	H
TIP35A	TIP35C TO-247	H
TIP35B	TIP35C TO-247	H
TIP35C	TIP35C TO-247	H
TIP35C SL	TIP35C TO-247	H
TIP36	TIP36C TO-247	H
TIP36A	TIP36C TO-247	H
TIP36B	TIP36C TO-247	H
TIP36B SL	TIP36C TO-247	H

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centralsemi.com.

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