

2N2322 2N2326  
 2N2323 2N2327  
 2N2324 2N2328  
 2N2325 2N2329

**SILICON CONTROLLED RECTIFIER  
 1.6 AMPS, 25 THRU 400 VOLTS**



**TO-39 CASE**

# Central<sup>TM</sup> Semiconductor Corp.

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2N2322 Series types are hermetically sealed Silicon Controlled Rectifiers designed for sensing circuit applications and control systems.

**MARKING: FULL PART NUMBER**

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

	SYMBOL	2N23__								UNITS
		<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	
Peak Repetitive Forward Voltage	$V_{DRM}$	25	50	100	150	200	250	300	400	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	25	50	100	150	200	250	300	400	V
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	40	75	150	225	300	350	400	500	V
RMS On-State Current	$I_T(\text{RMS})$					1.6				A
Average On-State Current ( $T_C=85^\circ\text{C}$ )	$I_T(\text{AV})$					1.0				A
Peak One Cycle Surge ( $t=8.3\text{ms}$ )	$I_{TSM}$					15				A
Peak Gate Power	$P_{GM}$					0.10				W
Average Gate Power	$P_{G(\text{AV})}$					0.01				W
Peak Gate Current	$I_{GM}$					0.10				A
Peak Gate Voltage	$V_{GM}$					6.0				V
Junction Temperature	$T_J$					-65 to +125				$^\circ\text{C}$
Storage Temperature	$T_{stg}$					-65 to +150				$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{DRM}, I_{RRM}$	Rated $V_{DRM}, V_{RRM}, R_{GK}=1.0\text{k}\Omega$		5.0	$\mu\text{A}$
$I_{GT}$	$V_D=6.0\text{V}, R_L=100\Omega$		200	$\mu\text{A}$
$I_H$	$V_D=6.0\text{V}, R_{GK}=1.0\text{k}\Omega$		2.0	mA
$V_{GT}$	$V_D=6.0\text{V}, R_L=100\Omega$		0.8	V
$V_{TM}$	$I_{TM}=1.0\text{A}, t_p=380\mu\text{s}$		1.5	V

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**TO-39 CASE - MECHANICAL OUTLINE**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.335	0.370	8.51	9.40
B (DIA)	0.315	0.335	8.00	8.51
C	-	0.040	-	1.02
D	0.240	0.260	6.10	6.60
E	0.500	-	12.70	-
F (DIA)	0.016	0.021	0.41	0.53
G (DIA)	0.200		5.08	
H	0.100		2.54	
I	0.028	0.034	0.71	0.86
J	0.029	0.045	0.74	1.14

TO-39 (REV: R1)

**LEAD CODE:**

- 1) CATHODE
- 2) GATE
- 3) ANODE (case)

**MARKING: FULL PART NUMBER**

R0 (11-December 2008)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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