

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

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Manufacturers of World Class Discrete Semiconductors

## CR6AF1GPP SERIES

GLASS PASSIVATED JUNCTION  
FAST RECOVERY SILICON RECTIFIER  
6.0 AMP, 100 THRU 1000 VOLTS

CASE 106

### FEATURES:

- 6 Amps at  $T_A = 60^\circ\text{C}$ , 3/8" Lead Length
- Glass Passivated Chip
- Compression Molded Epoxy
- Superior Solvent Resistance
- 300 Amps Surge Current
- Reliable Internal Construction
- Extensive Temperature Range

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CR6AF1GPP Series types are 6.0 Amp Glass Passivated Junction Silicon Rectifiers which are high quality, well constructed, highly reliable components designed for use in all types of military, commercial, industrial, entertainment, computer, and automotive applications. **THIS DEVICE IS MANUFACTURED WITH A GLASS PASSIVATED CHIP FOR OPTIMUM RELIABILITY.**

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

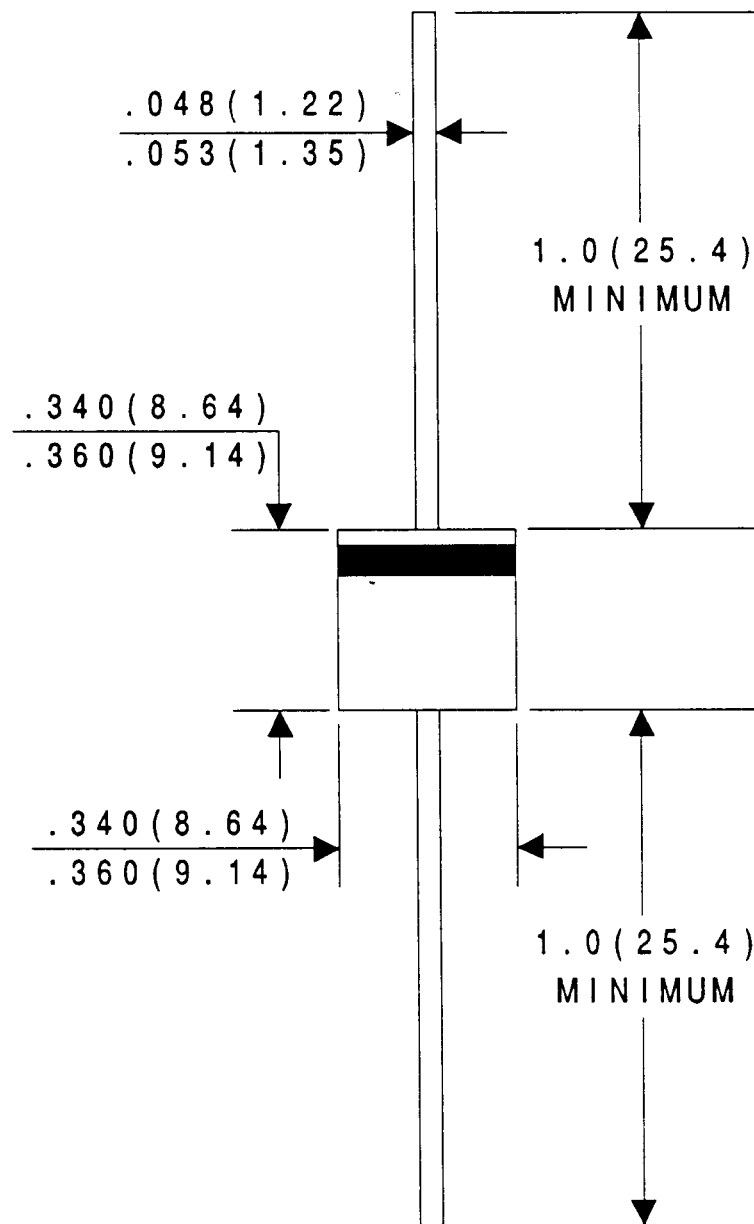
	<u>SYMBOL</u>	<u>CR6AF1</u> <u>GPP</u>	<u>CR6AF2</u> <u>GPP</u>	<u>CR6AF4</u> <u>GPP</u>	<u>CR6AF6</u> <u>GPP</u>	<u>CR6AF8</u> <u>GPP</u>	<u>CR6AF10</u> <u>GPP</u>	<u>UNITS</u>
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_R$	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Forward Current								
@ $T_A = 60^\circ\text{C}$	$I_O$				6.0			A
Peak Forward Surge Current	$I_{FSM}$				300			A
Operating and Storage								
Junction Temperature	$T_J, T_{stg}$				-65 to +175			$^\circ\text{C}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
$V_F$	$I_F = 6.0\text{A}$		1.3	V
$I_R$	$V_R = \text{Rated } V_{RRM}$		10	$\mu\text{A}$
$t_{rr}$	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$ (100V thru 400V)		200	ns
$t_{rr}$	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$ (600V)		250	ns
$t_{rr}$	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$ (800V thru 1000V)		500	ns

(SEE REVERSE FOR MECHANICAL OUTLINE)

# CASE 106 - MECHANICAL OUTLINE



All Dimensions in Inches (mm).