

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

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Manufacturers of World Class Discrete Semiconductors

1N4942 THRU 1N4948

FAST RECOVERY

GLASS PASSIVATED RECTIFIER

1.0 AMP, 200-1000 VOLTS

GPR-1A CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N4942 Series types are Silicon Rectifiers mounted in a hermetically sealed, glass passivated package designed for general applications where Fast Reverse Recovery times and high reliability is desired.

## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	1N4942	1N4943	1N4944	1N4945	1N4946	1N4947	1N4948	UNIT
V <sub>RRM</sub>	200	300	400	500	600	800	1000	V
V <sub>R</sub>	200	300	400	500	600	800	1000	V
V <sub>R</sub> (RMS)	140	210	280	350	420	560	700	V
I <sub>O</sub> (T <sub>A</sub> =55°C)				1.0				A
I <sub>FSM</sub>				50				A
T <sub>J</sub> , T <sub>stg</sub>				-65 TO +200				°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>		1.0	μA
V <sub>F</sub>	I <sub>F</sub> =1.0A		1.3	V
C	V <sub>R</sub> =12V, f=1.0MHz		45	pF
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recov. to 0.25A (1N4942-1N4945)		150	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recov. to 0.25A (1N4946, 1N4947)		250	ns
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, Recov. to 0.25A (1N4948)		500	ns

