

# CN8A - CN8M

**PRV : 50 - 1000 Volts**  
**I<sub>o</sub> : 8.0 Amperes**

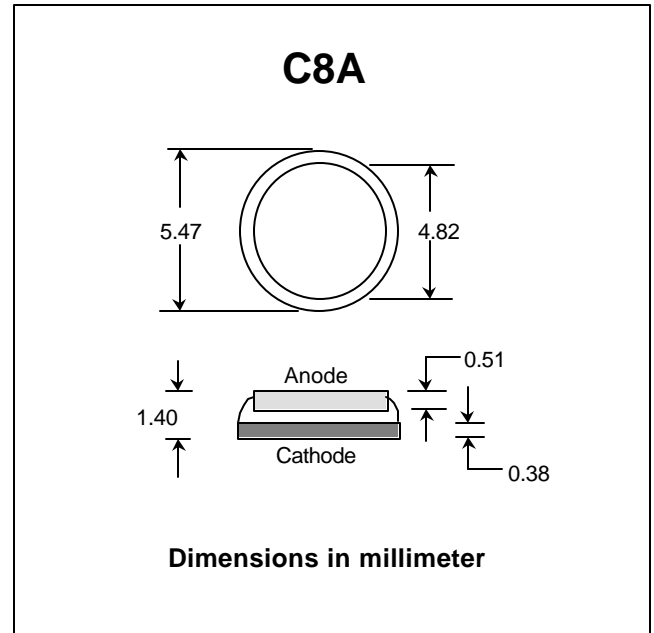
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Chip form

### MECHANICAL DATA :

- \* Case : C8A
- \* Terminals : Solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Cathode to bigger size slug, For Anode to bigger size slug use "R" suffix.
- \* Mounting position : Any
- \* Weight : 0.25 gram

# CELL RECTIFIER DIODES



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

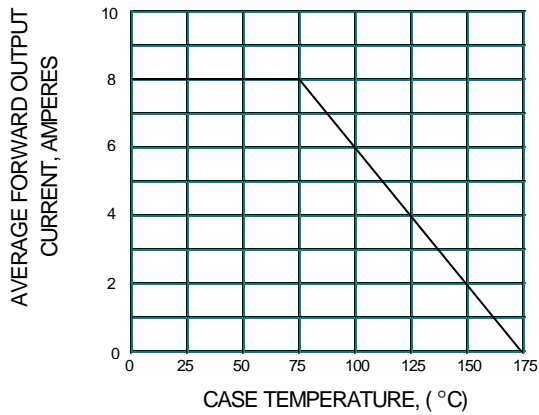
Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

RATING	SYMBOL	CN8A	CN8B	CN8D	CN8G	CN8J	CN8K	CN8M	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Current T <sub>c</sub> = 75°C	I <sub>F(AV)</sub>	8.0							Amps.
Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	300							Amps.
Maximum Forward Voltage at I <sub>F</sub> = 8 Amps.	V <sub>F</sub>	1.1							Volts
Maximum DC Reverse Current    T <sub>a</sub> = 25 °C at rated DC Blocking Voltage    T <sub>a</sub> = 100 °C	I <sub>R</sub>	5.0							μA
	I <sub>R(H)</sub>	1.0							mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	300							pF
Thermal Resistance, Junction to Case	R <sub>θJC</sub>	10							°C/W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175							°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175							°C

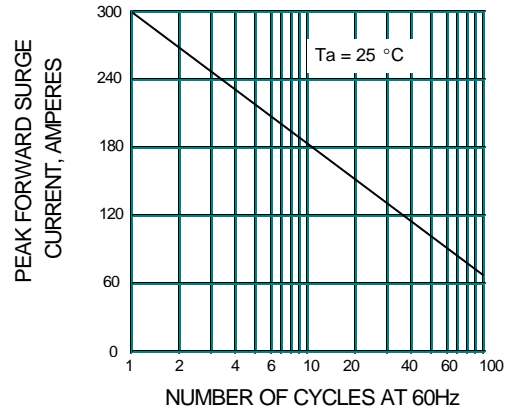
**Note :** (1) Measured at 1.0 MHz and applied reverse Voltage of 4.0 V<sub>DC</sub>

## RATING AND CHARACTERISTIC CURVES ( CN8A - CN8M )

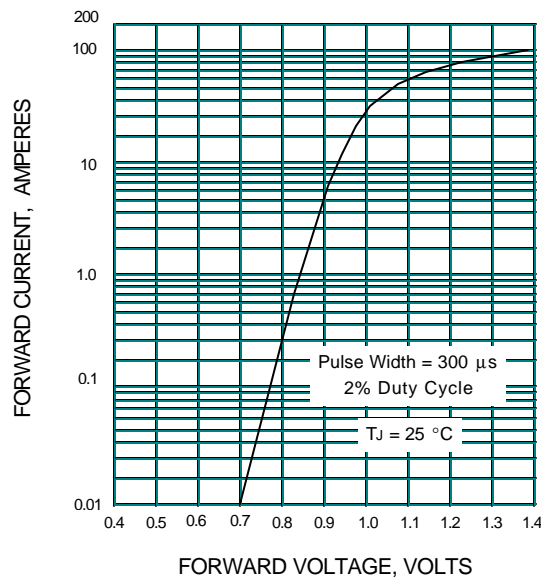
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



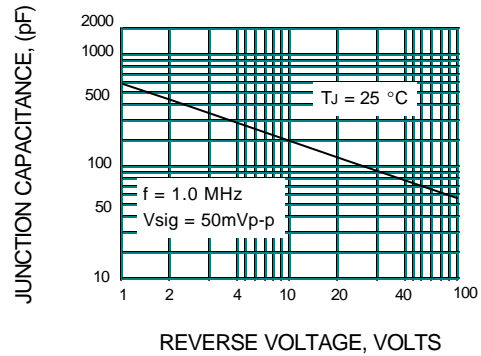
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL JUNCTION CAPACITANCE**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

