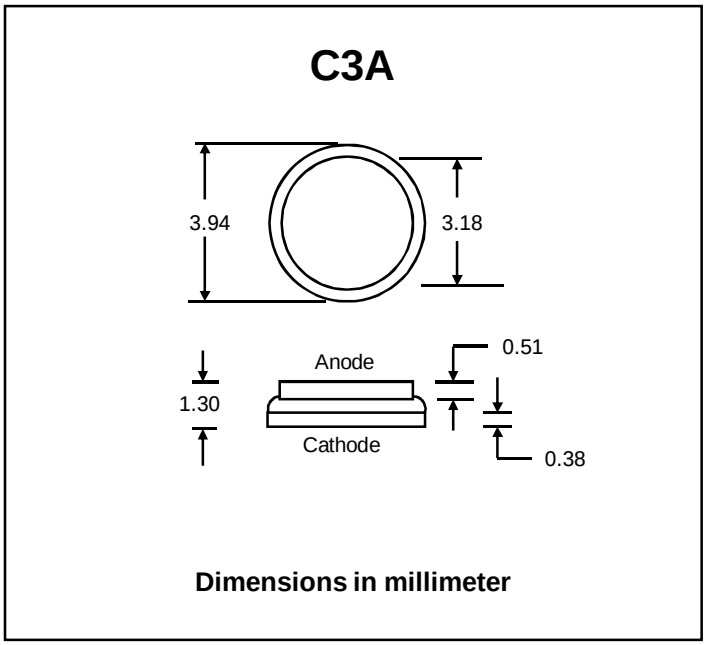
CN3A - CN3M

CELL RECTIFIER DIODES

PRV : 50 - 1000 Volts
Io : 3.0 Amperes



FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Chip form
* Pb / RoHS Free

MECHANICAL DATA :

* Case : C3A
* 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 : 0.11 gram

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	CN3A	CN3B	CN3D	CN3G	CN3J	CN3K	CN3M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current Tc = 75°C	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Maximum Forward Voltage at I_F = 3 Amps.	V_F	1.1							V
Maximum DC Reverse Current Ta = 25 °C	I_R	5.0							µA
at rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	1.0							mA
Typical Junction Capacitance (Note 1)	C_J	28							pF
Thermal Resistance, Junction to Case	RθJC	15							°C/W
Junction Temperature Range	T_J	- 65 to + 175							°C
Storage Temperature Range	T_{STG}	- 65 to + 175							°C

Note : (1) Measured at 1.0 MHz and applied reverse Voltage of 4.0 V_{DC}

RATING AND CHARACTERISTIC CURVES (CN3A - CN3M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

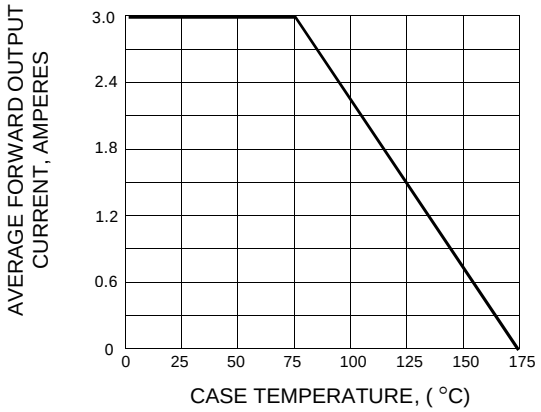


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

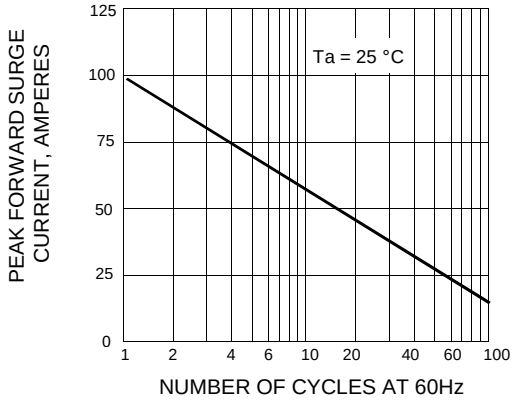


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

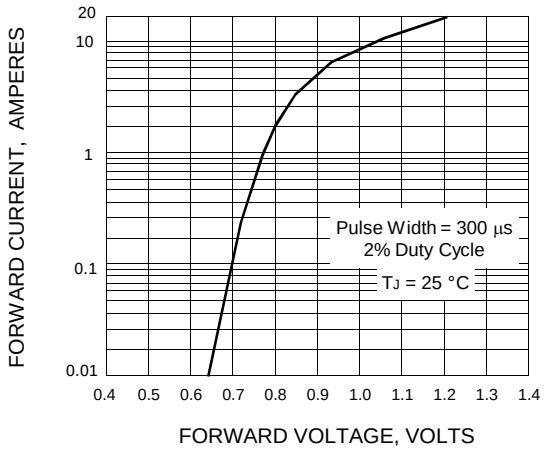


FIG 4 . - TYPICAL JUNCTION CAPACITANCE

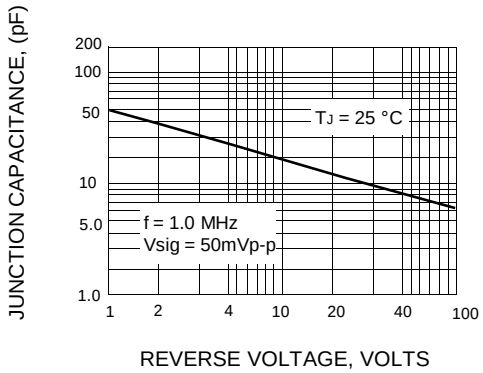


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS