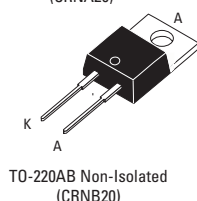
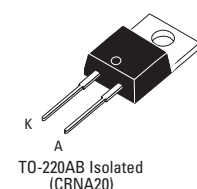




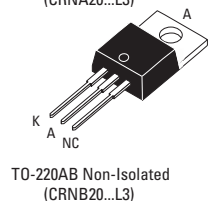
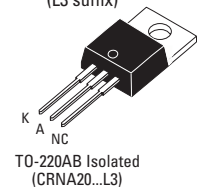
Applications

- Input Rectification
- Low Frequency Freewheel
- Battery Isolation

- Suitable for General Purpose Applications
- Isolated and Non-Isolated Tab
- Alternistor/No Snubber Type
- V_R/V_{RRM} 400, 600, 800, 1000V



3 Pin Package (L3 suffix)



Absolute Maximum Ratings

	CONDITIONS	SYMBOL	RATING
RMS On-State Current (full sine wave)	$T_c = 95^\circ\text{C}$ $T_c = 80^\circ\text{C}$ TO-220AB TO-220AB Iso	$I_{F(RMS)}$	20A
Average On-State Current	$T_c = 95^\circ\text{C}$ $T_c = 80^\circ\text{C}$ TO-220AB TO-220AB Iso	$I_{F(AV)}$	12.7A
Non Repetitive Surge Peak On-State Current (Full Cycle, T_j Initial = 25°C)	$F = 50\text{ Hz}$ $F = 60\text{ Hz}$	I_{FSM}	255A 300A
I^2t Value for fusing	$t_p = 10\text{ ms}$	I^2t	374A ² s
Storage Temperature Range		T_{stg}	-40 to +150°C
Operating Junction Temperature Range		T_j	-40 to +125°C
Isolation Voltage (CRNA Series only)		V_{ISO}	2500 V_{RMS}

Electrical Characteristics

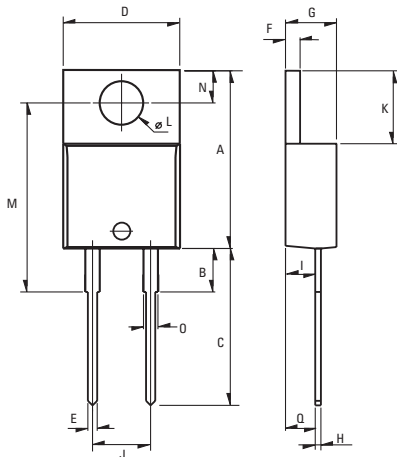
$V_{FM} @ 20A$	$T_j = 25^\circ\text{C}$	1.1V
$I_{RM} @ V_R = V_{RRM}$	$T_j = 25^\circ\text{C}$	0.1mA
$I_{RM} @ V_R = V_{RRM}$	$T_j = 125^\circ\text{C}$	1.0mA

Thermal Resistances

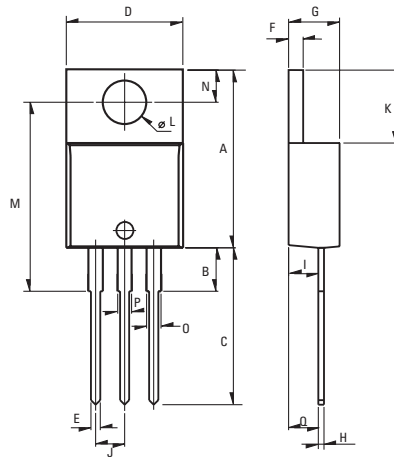
	SYMBOL	RATING
Junction to Case (AC)	TO-220AB $R_{th(j-c)}$	1.8°C/W
Junction to Case (AC)	TO-220AB Isolated $R_{th(j-c)}$	2.7°C/W
Junction to Ambient	TO-220AB $R_{th(j-a)}$	60°C/W
Junction to Ambient	TO-220AB Isolated $R_{th(j-a)}$	60°C/W

GENERAL NOTES

1. All parameters at 25 degrees C unless otherwise specified.



Weight: 2.3g (0.08 oz)



Weight: 2.3g (0.08 oz)

Dimensions - 2 Pin

REF.	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	15.24		15.75	0.6		0.62
B		3.23			0.127	
C	12.78		13.79	0.503		0.543
D	9.96		10.36	0.392		0.408
E	0.69		0.94	0.027		0.037
F	1.22		1.32	0.048		0.052
G	4.62		4.83	0.182		0.19
H	0.46		0.61	0.018		0.024
I	2.49		2.84	0.098		0.112
J	2.39		2.69	0.094		0.106
K	6.48		6.88	0.255		0.271
L	3.78		3.89	0.149		0.153
M	15.49	16	16.51	0.61	0.63	0.65
N	2.59		2.9	0.102		0.114
O	0.99		1.55	0.039		0.061
Q		2.67			0.105	

L3 Dimensions - 3 Pin

REF.	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	15.24		15.75	0.6		0.62
B		3.23			0.127	
C	12.78		13.79	0.503		0.543
D	9.96		10.36	0.392		0.408
E	0.69		0.94	0.027		0.037
F	1.22		1.32	0.048		0.052
G	4.62		4.83	0.182		0.19
H	0.46		0.61	0.018		0.024
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N	2.59		2.9	0.102		0.114
O	0.99		1.55	0.039		0.061
P	0.99		1.55	0.039		0.061
Q		2.67			0.105	

Part Number Designation

Number Designation

SERIES

CRN

B

20

-

800

L3

PT

Rated Current

20: 20 Amp

Package

Blank: 2 Pin

L3: 3 Pin

Isolation Type

A: Isolated

B: Non-Isolated

Maximum Blocking Voltage

400: 400Vpk

600: 600Vpk

800: 800Vpk

1000: 1000Vpk

Packaging

Blank: Bulk

PT: Plastic Tube

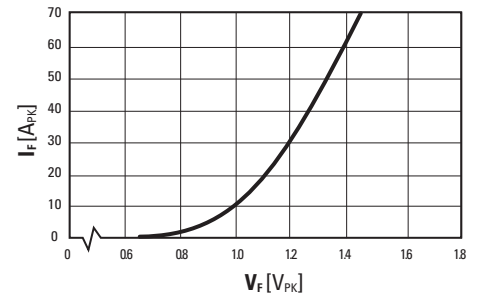


Fig. 1: On-state current versus on-state voltage (instantaneous values)

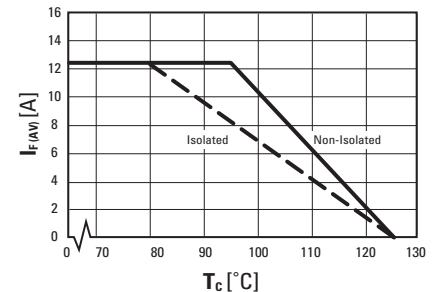


Fig. 2: Average on-state current versus case temperature

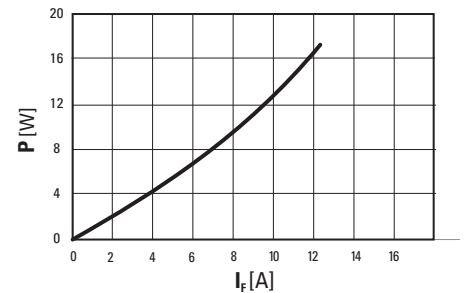


Fig. 3: Power dissipation versus average on-state current

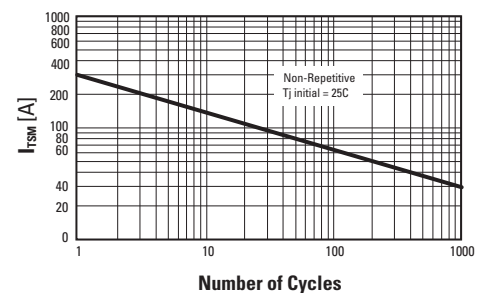


Fig. 4: Non-repetitive surge peak on-state current versus number of cycles.

ISO9001 CERTIFIED

Approvals

UL Recognized Component - E72445 (CRNA Series)

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