

TECHNICAL DATA  
DATA SHEET 1177, REV. B

## THREE PHASE FULL WAVE BRIDGE RECTIFIER ASSEMBLY

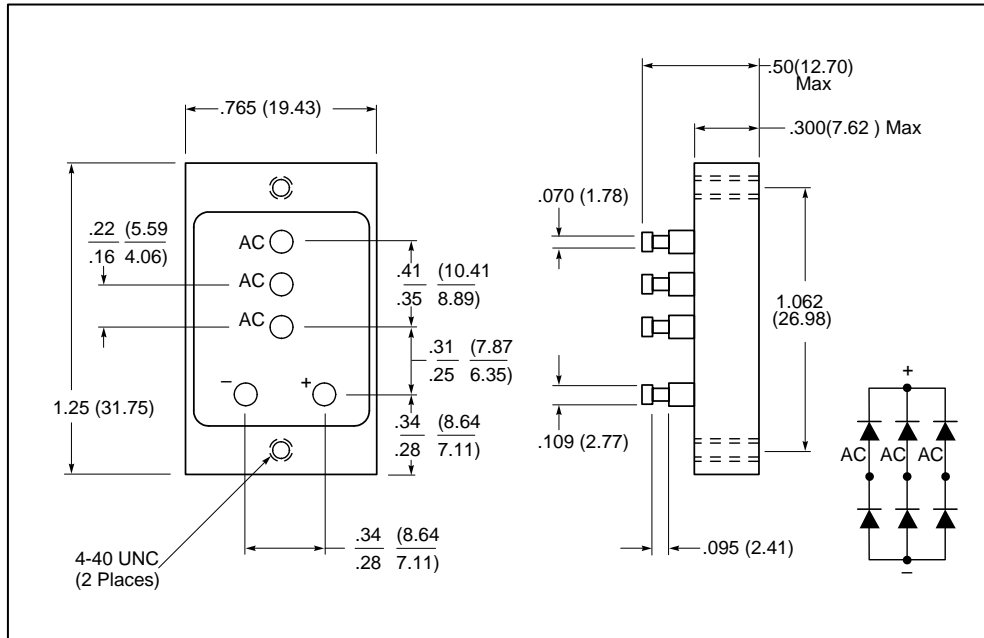
**DESCRIPTION: A 50/100/150 VOLT, 15 AMP, 40 NANOSECOND THREE PHASE BRIDGE RECTIFIER ASSEMBLY.**

**MAX. RATINGS / ELECTRICAL CHARACTERISTICS** All ratings are at  $T_A = 25^\circ\text{C}$  unless otherwise specified.

RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Peak Inverse Voltage (PIV)  S10A305HE S10A310HE S10A315HE	-	-	-	50 100 150	Vdc
Average DC Output Current ( $T_C = \text{Case Temp}$ )  ( $I_o$ )	$T_C = 55^\circ\text{C}$ $T_C = 100^\circ\text{C}$ $T_C = 125^\circ\text{C}$	-	-	15 9.0 5.0	Amps
Average DC Output Current Ambient Temp. (no heat sink) ( $I_o$ )	$T_A = 25^\circ\text{C}$ $T_A = 55^\circ\text{C}$ $T_A = 100^\circ\text{C}$	-	-	4.75 3.75 2.25	Amps
Peak Single Cycle Surge Current ( $I_{FSM}$ )	$t_p = 8.3$ ms Single Half Cycle Sine Wave, Superimposed On Rated Load	-	-	100	Amps(pk)
Peak Recurring Surge Current ( $I_{FRM}$ )	$T_A = 25^\circ\text{C}$	-	-	35	Amps
Operating and Storage Temp. ( $T_{op}$ & $T_{stg}$ )	-	-55	-	+150	$^\circ\text{C}$
Maximum Forward Voltage ( $V_f$ )	$I_f = 6.0\text{A}$ (300 $\mu\text{sec}$ pulse, duty cycle < 2%)	-	-	1.0	Volts
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	-	-	10 100	$\mu\text{Amps}$
Reverse Recovery Time ( $t_{rr}$ )	$I_f = 0.5\text{A}$ , $I_r = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$	-	-	40	nsec
Thermal Resistance ( $\theta_{JL}$ )	-	-	-	3.0	$^\circ\text{C/W}$

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**MECHANICAL DIMENSIONS: In Inches / mm**



Notes:  
Case finish - Black Anodized  
Potted dimension - uncontrolled

**FIG. 410**

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