

**NOTES:**

1. SET VOLTAGE:  $14.5 \pm 0.2$
2. 45 AMP FET REGULATOR.
3. TOTAL REVERSE LEAK CURRENT:  
ALL UNITS TO FULFILL REQUIREMENT OF .02mA OR LESS AT 20C.
4. DIODE FORWARD VOLTAGE:  
ALL UNITS TO FULFILL REQUIREMENT OF LESS THAN .77V.
5. FET ON VOLTAGE:  
ALL UNITS TO FULFILL REQUIREMENT OF LESS THAN .45V.
6. MATES WITH FURUKAWA
  - (A) Connector: QLW-A-B3F-B (1)  
Terminal: QLW-F-300 (2)  
Wire Seal: QLW-W-300 (2)  
Seal: QLW-W-D (1)
  - (B) Connector: QLW-A-3F-GR (1)  
Terminal: QLW-F-300 (3)  
Wire Seal: QLW-W-300 (3)
7. SEE SPEC LTR2012-020 THRU LTR2012-029 FOR QUALIFICATION TEST.

DRN	CHK	DESCRIPTION	ECN #	REV	DATE	PROPRIETARY AND CONFIDENTIAL
JG				P01	3/12/12	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TROMBETTA - ELECTRONICS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TROMBETTA - ELECTRONICS IS PROHIBITED.
JG		ADDED NOTES 3, 4, 5		P02	10/12/12	
JG		UPDATED CHARTS ON PG. 1. UPDATED NOTES ON PG. 1		P03	11/18/12	
		QUOTE				

		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: ± .01 ANGULAR: MACH ± .01 TWO PLACE DECIMAL ± .001 THREE PLACE DECIMAL ± 0.005 METRIC IN (mm)	DRAWN JG	NAME JG	DATE 3/12/12	TROMBETTA - ELECTRONICS 197 Commercial St Malden, Ma. 02148
		MATERIAL	CHECKED	ENG APPR.	MFG APPR.	
		FINISH	Q.A.	COMMENTS:		SIZE <b>B</b>
NEXT ASSY		USED ON				DWG. NO. <b>A3481</b>
APPLICATION		DO NOT SCALE DRAWINGS				REV <b>P03</b>
						SCALE: N/A
						WEIGHT:
						SHEET 1 OF 2

8 7 6 5 4 3 2 1

CHART 1 NO AIRFLOW MEASUREMENTS TAKEN AT 20°C AMBIENT

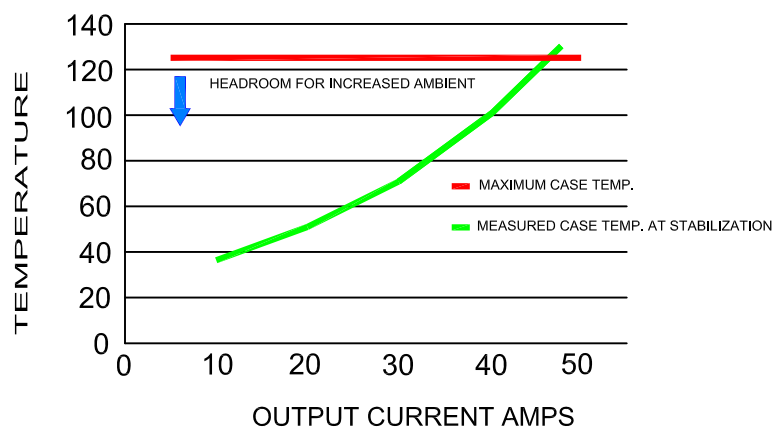
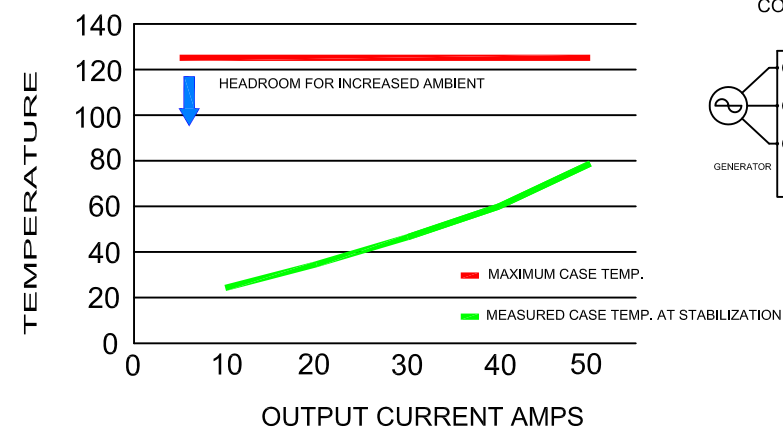
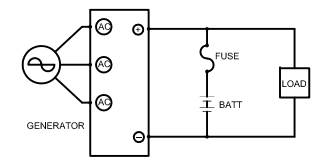


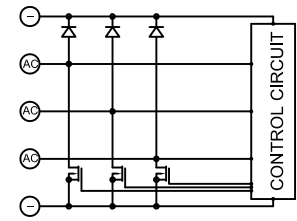
CHART 2 1 METER PER SECOND AIRFLOW MEASUREMENTS TAKEN AT 20°C AMBIENT



CONNECTING DIAGRAM



CIRCUIT DIAGRAM



REGULATOR RATINGS			
STORAGE TEMPERATURE		MIN -30°C TO MAX +80°C	
OUTPUT CURRENT		50 AMPS AT CASE TEMP OF 125°C	SEE CHART #1 & #2
INPUT FREQUENCY		UP TO 3KHz	BASED ON RPM AND NUMBER OF STATOR MAGNETS
ENVIRONMENTAL		SEE REPORT LTR2012-020 THRU 029	
TEMPERATURE RATINGS			
FET JUNCTIONS	Tj	MAX 175°C	PER MANUFACTURER'S SPECIFICATION
DIODE JUNCTIONS	Td	MAX 150°C	PER MANUFACTURER'S SPECIFICATION
CASE TEMPERATURE	Tc	MAX 125°C	SEE CHART #1 & #2
AMBIENT TEMPERATURE NO AIRFLOW	Ta	MAX 80°C AT 30 AMPS OUTPUT	SEE CHART #1 NO AIRFLOW
	Ta	MAX 20°C AT 50 AMPS OUTPUT	SEE CHART #1 NO AIRFLOW
AMBIENT TEMPERATURE AIRFLOW 1 m/s	Ta	MAX 80°C AT 45 AMPS OUTPUT	SEE CHART #2 AIRFLOW 1 m/s
	Ta	MAX 75°C AT 50 AMPS OUTPUT	SEE CHART #2 AIRFLOW 1 m/s

DRN	CHK	DESCRIPTION/EDN#	REV	DATE	PROPRIETARY AND CONFIDENTIAL
JG			P01	3/12/12	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TROMBETTA - ELECTRONICS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TROMBETTA - ELECTRONICS IS PROHIBITED.
JG		ADDED NOTES 3, 4, 5	P02	10/12/12	
JG		UPDATED CHARTS ON PG 2. UPDATED NOTES ON PG 1	P03	11/19/12	
PROO					

		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULARS MMACH ± TWO PLACE DECIMAL ± 0.01 THREE PLACE DECIMAL ± 0.005 METRIC IN (mm)	DRAWN	JG	DATE	3/12/12	<b>TROMBETTA - ELECTRONICS</b> 197 Commercial St Malden, Ma. 02148  <b>TITLE:</b> <b>45A FET REGULATOR</b>  SIZE <b>B</b> DWG. NO. <b>A3481</b> REV <b>P03</b> SCALE: N/A WEIGHT: SHEET 2 OF 2
		INTERPRET GEOMETRIC TOLERANCES PER: ASME Y14.5M-1994	CHECKED				
		MATERIAL	ENG APPR.				
		FINISH	MFG APPR.				
NEXT ASSY	USED ON		G.A.				
APPLICATION		DO NOT SCALE DRAWING	COMMENTS:				

8 7 6 5 4 3 2 1