

1 & 2 WATT DC/DC CONVERTERS FOR LINE DRIVERS AND RECEIVERS

KEY FEATURES

- Designed For Analog Requirements
- 24 PIN DIP Package
- Input/Output Isolation
- PC Mountable, Low Profile
- Continuous Self Recovering Short Circuit Protection
- 100% Burned-In
- 3 Year Warranty



DESCRIPTION

These 1 Watt and 2 Watt DC/DC converters operate from a 5V source and make available isolated single 5V, dual 5V, and dual 10V out at board level. The converters operate without derating over their full temperature range. Solid tantalum capacitors are used for enhanced reliability. They are designed to meet the power and isolation requirements of line drivers and receivers for RS232, 422 and 423 interface as well as various other logic applications.

SELECTION GUIDE Standard Products

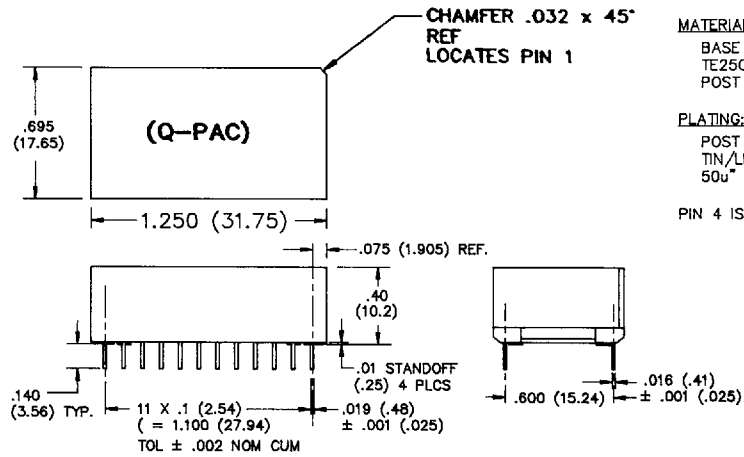
DEVICE TYPE	INPUT VOLTAGE RANGE VDC	INPUT CURRENT A (MAX)	OUTPUT VOLTAGE VDC (±5%)	OUTPUT CURRENT ma (MAX)	PACKAGE/ PINOUT
2QP5U5	4.75 - 5.25	.570	+ or -5	400	QA
2QA5-5	4.75 - 5.25	.500	+5	300	QC
			-5	45	
QA5-5	4.75 - 5.25	.250	+5	130	QC
			-5	25	
2SA10-10	4.75 - 5.25	.600	+10 & -10	20-100	SC
2QA10-10	4.75 - 5.25	.600	+10 & -10	20-100	QC



GENERAL ELECTRICAL SPECIFICATIONS
(Specifications at Nominal Input and 25°C)

PARAMETER	LIMIT	CONDITIONS
Output Voltage: QA5-5	±5%	Output #1: +5V, 130 ma
2QA5-5	±5%	Output #2: -5V, 25 ma
2QP5U5	±5%	Output #1: +5V, 300 ma
2QA10-10 & 2SA10-10	±5%	Output #2: -5V, 45 ma
Output Ripple & Noise:		Output: +5V, 400 ma
QA5-5	200mV, P-P Max.	Output #1: +10V, 150 ma
2QA5-5	300mV, P-P Max.	Output #2: -10V, 20 ma
2QP5U5	100mV, P-P Max.	
2QA10-10 & 2SA10-10	300mV, P-P Max.	
Input/Output Isolation	500 VDC, 10 ³ megohms (Min)	
Input/Voltage Range	±5%	
Input Current: QA5-5	250 ma Max.	Nom. Line at Full Load
2QA5-5	500 ma Max.	Nom. Line at Full Load
2QP5U5	570 ma Max.	Nom. Line at Full Load
2QA10-10 & 2SA10-10	600 ma Max.	Nom. Line at Full Load
Operating Temperature	-25°C to 85°C -25°C to 71°C -25°C to 75°C	QA5-5 and 2QA5-5 2QP5U5 2QA10-10 & 2SA10-10
Storage Temperature	-55°C to 125°C	All Devices
Line Regulation	1.25%/1% Vin	Typical
Load Regulation: QA5-5	10% Max.	10% to 100% FL
2QA5-5	10% Max.	20% to 100% FL
2QA10-10 & 2SA10-10	±10% Max. ±VDC	Rated Load
Frequency: QA5-5	100 KHz Typical	Nom. Line at Full Load
2QA5-5	75 KHz Typical	Nom. Line at Full Load
2QA10-10 & 2SA10-10	110 KHz Typical	Nom. Line at Full Load
Efficiencies	70% Typical	Nom. Line at Full Load
Offset Load Conditions: QA5-5		Output #1: +5V, 155 ma Output #2: -5V, 0 ma Output #1: +5V, 80 ma Output #2: -5V, 75 ma
2QA5-5		Output #1: +5V, 345 ma Output #2: -5V, 0 ma Output #1: +5V, 250 ma Output #2: -5V, 95 ma

MECHANICAL SPECIFICATION



NOTES:

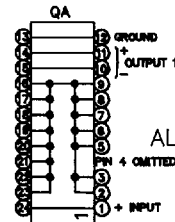
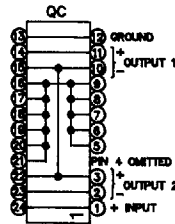
MATERIALS:

BASE AND COVER: BLACK STANYL 4/6 NYLON
TE250F6 UL 94V-0 RATED.
POST STYLE CONTACT: HALF HARD BRASS.

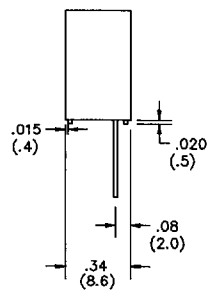
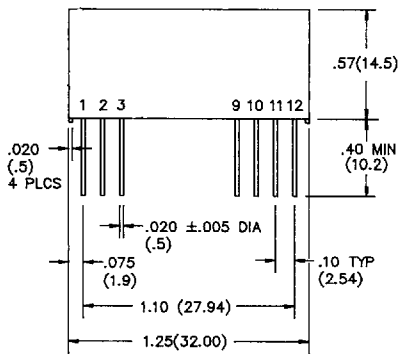
PLATING:

POST STYLE CONTACT: 100u" MIN 60/40 BRIGHT
TIN/LEAD PER MIL-T-10727 OVER
50u" MIN NICKEL PER QQ-N-290.

PIN 4 IS MISSING.



ALL VIEWED FROM TOP



SC(DUAL OUTPUTS)	
PIN	PIN CONNECTIONS
1	+INPUT
2	-OUTPUT 2
3	+OUTPUT 2
9	NC
10	-OUTPUT 1
11	+OUTPUT 1
12	-INPUT

NOTES:

- ALL DIMENSIONS IN PARENTHESES ARE METRIC.
- TOLERANCES UNLESS OTHERWISE SPECIFIED: .XX = ±.03
.XXX = ±.015
- SC SERIES PINS 3 AND 10 CONNECTED INTERNALLY.