

PRODUCT SPECIFICATION

Half bridge @ 25kHz.

QT3 Series

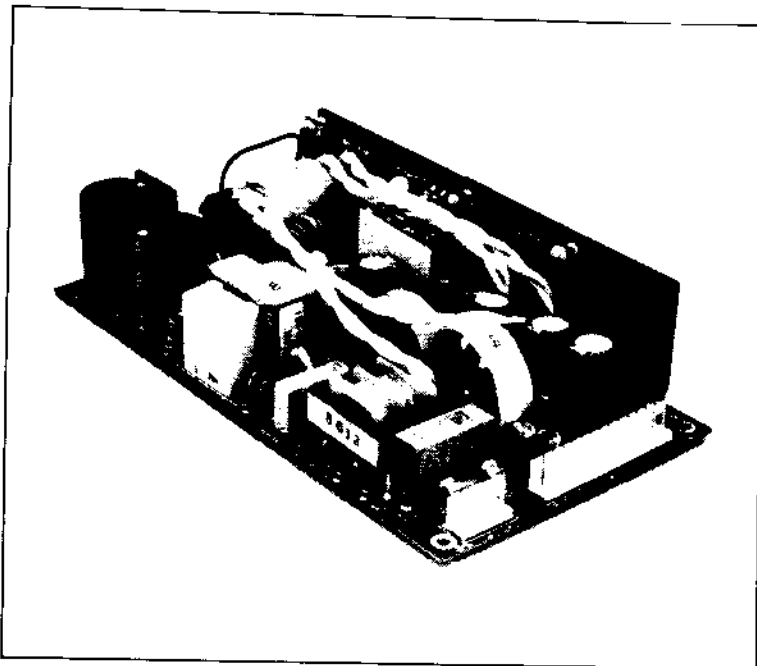
Multiple Output Switching
Power Supplies

QT1 with four outputs.

QT13 is QT3 with terminal block.

Features

- UL Recognized to UL 1012 and 478 ‡
- CSA Certified to C 22.2 No. 220 - M1986 and EB1402 ‡
- TUV Licensed to IEC 380 and 950 and VDE 0806 Class 1 SELV ‡
- Fully compliant with FCC and VDE (Level A) standards for EMI
- Accommodates high-peak disk drive requirements
- 0° - 50° C operating ambient with convection cooling only
- AC input provisions:
 - 90-132/180-264 VAC, 47-63Hz
 - jumper relocation for VAC range selection
 - input surge current limited
 - brown out protected
- DC output provisions:
 - complete overload protected
 - overvoltage protected
 - reverse voltage protected
 - low noise outputs



100/125 Watts Up to 4 Outputs

Available Outputs

Standard Output Voltage Combination	<i>opt</i> Output 1			<i>opt</i> Output 2			Output 3			Output 4		
	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	+5	15.0	20.0	+12	4.0	8.0	-12	1.0	1.5	-5	0.5	1.0
B	+5	15.0	20.0	+24	3.0	5.0	-24	1.0	1.5	-12	0.5	1.0
C	+5	15.0	20.0	+15	4.0	8.0	-15	1.0	1.5	-12	0.5	1.0

15% min load

linear post regulator

3 terminal

Total (sum) of rated DC output power, maximum:
 Convection cooling only 100 Watts
 Forced-air cooling (25 CFM) 125 Watts
 Peak power (10 sec) 125 Watts

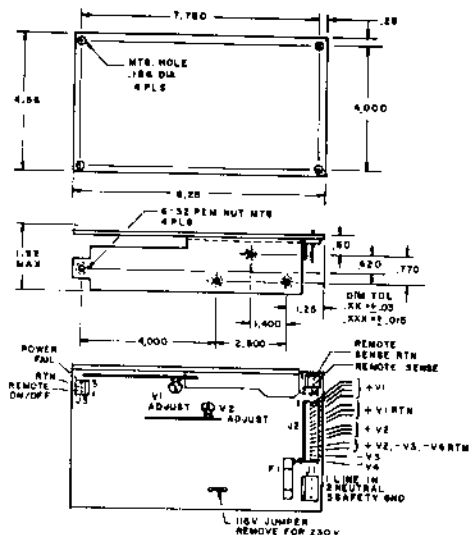
- Other output combinations are also available; consult factory
- All outputs share a common return; consult factory for alternatives.
- Increased output power can be obtained by appropriate heat sink mounting

‡Most models; consult factory

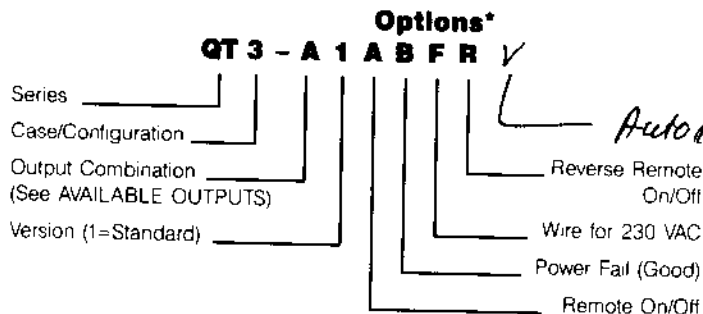


QT3 Series

Outline/Mounting/Interface



Ordering Information



*List all options selected

All Power Supplies are warranted to be free of defects in materials and workmanship for a period of one year.

J-1	PCB Connector	Mating Connector	J-3	PCB Connector	Mating Connector
AMP	640445-5	640426-5	AMP	640445-3	640426-3
MOLEX	09-74-1051	09-50-3051	MOLEX	09-74-1031	09-05-3031
PANDUIT	HLSS-156-5	CE 156F20-5	PANDUIT	HLSS-156-3	CE 156F20-3
J-2	PCB Connector	Mating Connector	J-4	PCB Connector	Mating Connector
AMP	1-640445-4	1-640426-4	AMP	640456-2	640440-2
MOLEX	09-74-1141	09-50-3141	MOLEX	22-23-2021	10-11-2023
PANDUIT	HLSS-156-14	CE 156F20-14	PANDUIT	MLSS/00-2	CE 100F22-2

All Mating Connectors fit any PCB Connector

Specifications

AC Input	Nominal 115/230 VAC, 47-63Hz Range 90-132/180-264 VAC; jumper selectable	Reverse Voltage Protection	100% of rated current outputs
DC Outputs	Nominal See AVAILABLE OUTPUTS table Range: Outputs 1 and 2 adjustable $\pm 5\%$. Outputs 3 and 4 fixed $\pm 5\%$	Hold-up Time	20 ms after loss of nominal AC Input, for specified load regulation
Regulation	Line: $\pm 0.25\%$ all outputs, full AC Input range Load: $\pm 0.25\%$ for Outputs 1 and 2, $\pm 1\%$ for Outputs 3 and 4, for $\geq 10\%$ loading of Output 1 and zero to full loading of other Outputs	In-rush Current	35A Pk, cold start
Ripple/Noise	Sum 1% Pk-Pk all outputs	Fusing (F-1)	4A/2A, 5MF for 115/230 VAC
Overshoot & Undershoot	Deviation: 2% for 25% load change at 5A/usec Response: 200 usec to 1% deviation, all outputs, turn-on or turn-off	Remote Sense	For Output 1 only
Temperature Coefficient	$\pm 0.02\% / ^\circ\text{C}$ all outputs	Remote On/Off*	Turn on: open circuit or TTL "hi" Turn off: short circuit or TTL "lo"
Temperature Range	Operation: 0° to 50°C at rated output power; derate linearly to 50% power at 70°C Storage: -55°C to 85°C	Power Fail (Good)*	Power applied: Output "lo" until all outputs are in regulation Power lost: After one cycle ride-through (16 msec minimum) output goes "lo" 4 msec minimum before loss of regulation Output 1 and 2 returns are commoned
Efficiency	75% typical	Shock/Vibration	Per MIL-STD-810C Vibration: Method 514.2 Procedures X, X1 Shock: Method 516.2, Procedures I, III Shock (Transit): Method 516.2, Procedure II
Overload Protection	Output 1: current limited by primary current level Outputs 2, 3 and 4: current limited by post regulator characteristics	Weight	1 lb., 14 oz.
Overvoltage Protection	Output 1: output level $> 6.25V \pm 5\%$ causes shutdown (AC input cycle for restart) Outputs 2, 3 and 4: post regulators have quasi-regulated inputs.		

Specifications are subject to change without notice

CHEROKEE INTERNATIONAL, INC.

2841 Dow Ave., Tustin, CA 92680-7211
 (714) 544-6665 • FAX (714) 838-4742
 TWX (714) 510-101-0493