

**PRODUCT SPECIFICATION**

*Half bridge @ 25kHz*

**QT6 Series**

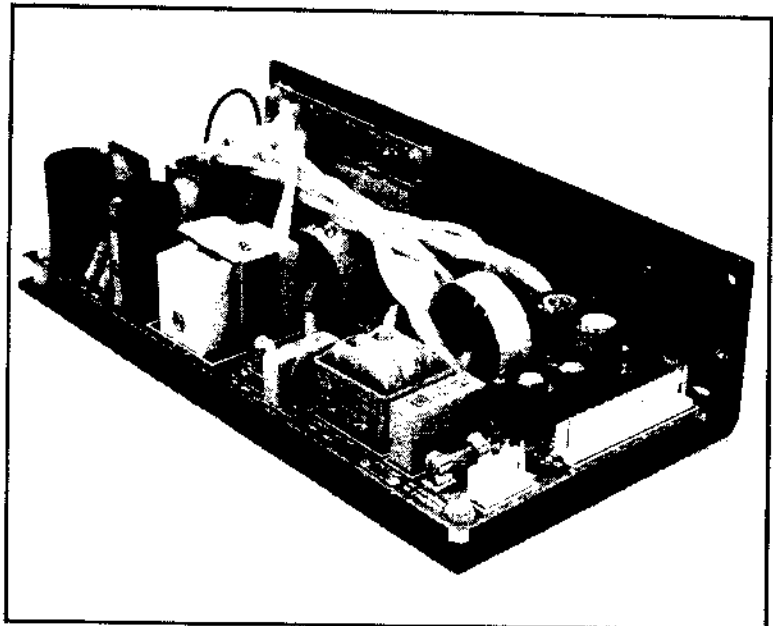
Multiple Output Switching  
Power Supplies

*QT5 with chassis*

*QT16 is QT6 with TB.*

**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 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



**150/175 Watts Up to 4 Outputs**

**Available Outputs**

Standard Output Voltage Combination	Output 1 <i>Out Vals</i>		Output 2			Output 3			Output 4 <i>Vals Floccet</i>			
	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps	Volts	Rated Amps	Peak Amps
A	5	20.0	25.0	+12	2.0	3.0	-12	1.0	1.5	24.0	5.0	8.0
B	5	20.0	25.0	+12	2.0	3.0	-12	1.0	1.5	12.0	6.0	8.0
C	5	20.0	25.0	+12	2.0	3.0	-12	1.0	1.5	5.0	6.0	8.0
D	+5	10.0	20.0	-12	4.5	5.0	—	—	—	+24.0	5.0	8.0
E	5	20.0	25.0	—	—	—	—	—	—	12.0	6.0	8.0
F	5	25.0	30.0	—	—	—	—	—	—	—	—	—
G	5	20.0	25.0	+24	1.0	1.5	-12	0.5	1.0	12.0	6.0	8.0
H	5	20.0	25.0	+15	2.0	3.0	—	—	—	15.0	5.0	8.0
I	5	20.0	25.0	+15	3.0	—	-15	1.0	1.5	24.0	5.0	8.0

Total (sum) of rated DC output power, maximum:  
 Convection cooling only 150 Watts  
 Forced-air cooling (25 CFM) 175 Watts  
 Peak power (10 sec) 175 Watts  
 (Combination "D" provides increased peak power)

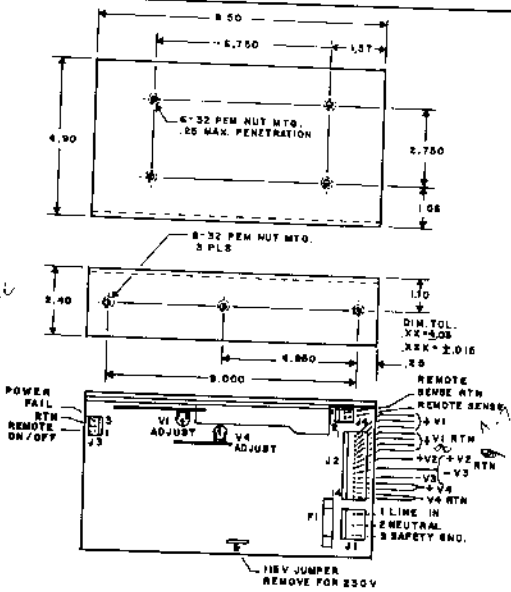
- Other output combinations are also available; consult factory
- Outputs 1 and 4 have independent returns; Outputs 2 and 3 share a common return, save for D; consult factory for alternatives.
- Combination D commons Output 1 return, Output 4 return and Output 2, thereby providing a -12V output at the Output 2 return

†Most models, consult factory

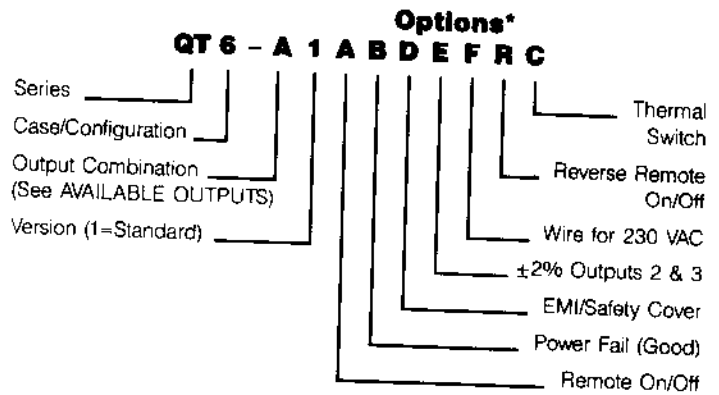


# QT6 Series

## 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
AMP	640445-5	640426-5
MOLEX	09-74-1051	09-50-3051
PANDUIT	HLSS-156-5	CE 156F20-5
J-2		
AMP	1-640445-4	1-640426-4
MOLEX	09-74-1141	09-50-3141
PANDUIT	HLSS-156-14	CE 156F20-14

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

All Mating Connectors fit any PCB Connector

## Specifications

<b>AC Input</b>	Nominal: 115/230 VAC, 47-63Hz Range: 90-132/180-264 VAC; jumper selectable	<b>Reverse Voltage Protection</b>	100% of rated current outputs
<b>DC Outputs</b>	Nominal: See AVAILABLE OUTPUTS table Range: Outputs 1 and 4 adjustable ±5% Outputs 2 and 3 fixed ±5% (optionally ±2%)	<b>Hold-up Time</b>	20 ms after loss of nominal AC Input, for specified load regulation
<b>Regulation</b>	Line: ±0.25%, all outputs, full AC Input range Load: ±0.25% for Outputs 1 and 4, ±1% for Outputs 2 and 3, for ≥10% loading of Output 1 and zero to full loading of other Outputs	<b>In-rush Current</b>	35A Pk, cold start
<b>Ripple/Noise</b>	Sum: 1% Pk-Pk, all outputs	<b>Fusing (F-1)</b>	4A/2A, 5MF for 115/230 VAC
<b>Overshoot &amp; Undershoot</b>	Deviation: 2% for 25% load change at 5A/usec Response: 200 usec to 1% deviation, all outputs, turn-on or turn-off	<b>Remote Sense</b>	For Output 1 only
<b>Temperature Coefficient</b>	±0.02% / °C, all outputs	<b>Remote On/Off*</b>	Turn on: open circuit or TTL "hi" Turn off: Short circuit or TTL "lo" Option "R" is the reverse
<b>Temperature Range</b>	Operation: 0° to 50°C at rated output power; derate linearly to 50% power at 70°C Storage: -55°C to 85°C 75% typical	<b>Power Fail (Good)*</b>	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
<b>Efficiency</b>	75% typical	<b>Shock/Vibration</b>	Per MIL-STD-810C Vibration: Method 514.2 Procedures X, X1 Shock Method 516.2, Procedures I, III Shock (Trans): Method 516.2, Procedure II
<b>Overload Protection</b>	Output 1: current limited by primary current level Outputs 2, 3 and 4: current limited by post regulator characteristics	<b>Weight</b>	3 lbs.
<b>Overvoltage Protection</b>	Output 1: output level >6.25V ±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 510-101-0493