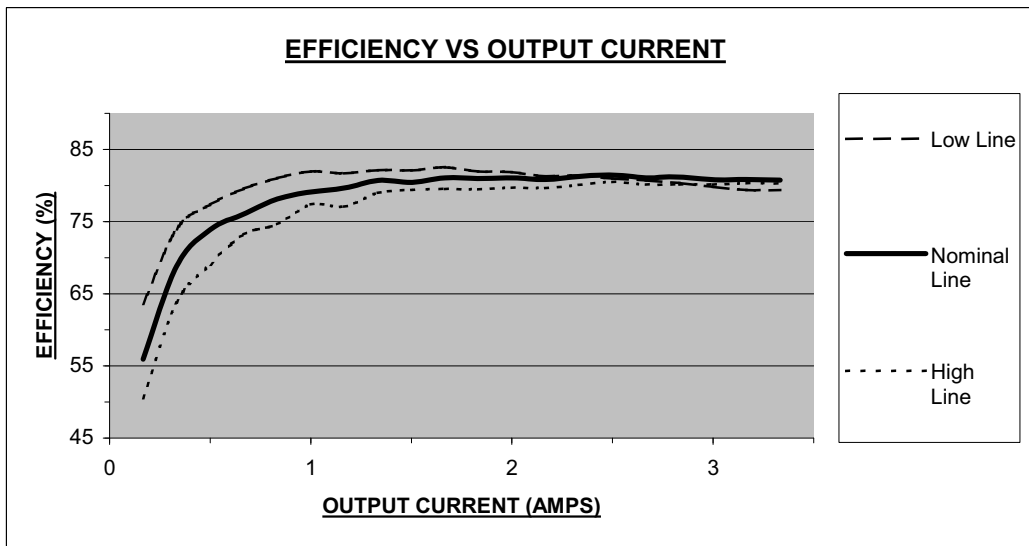
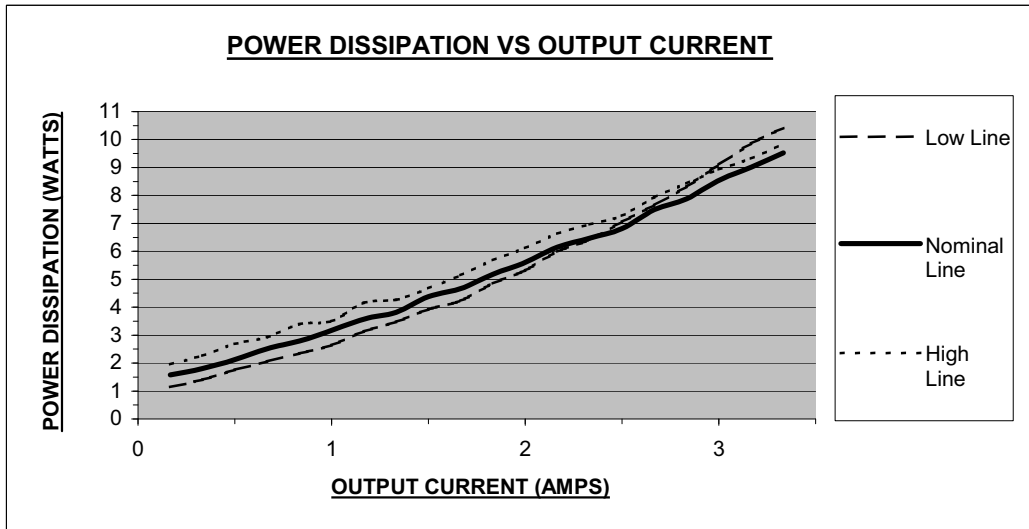
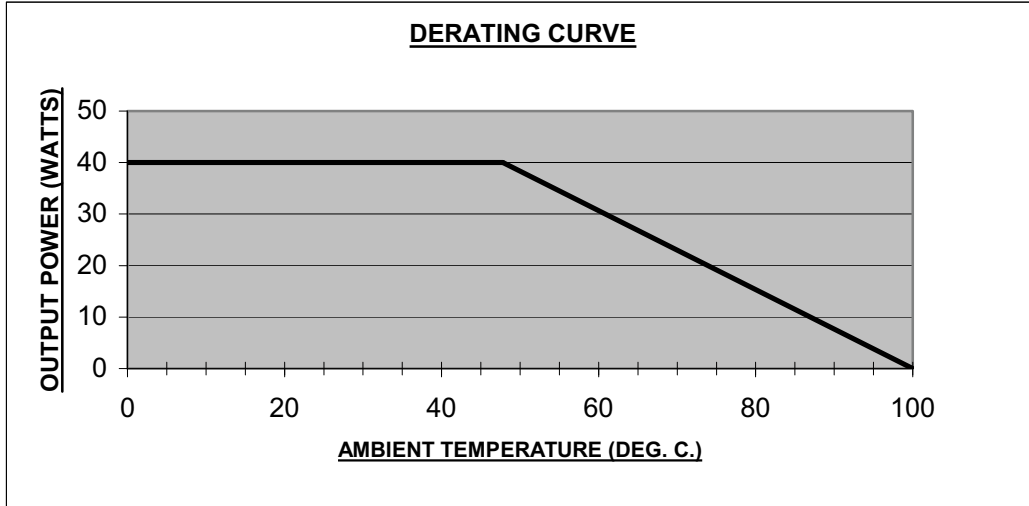
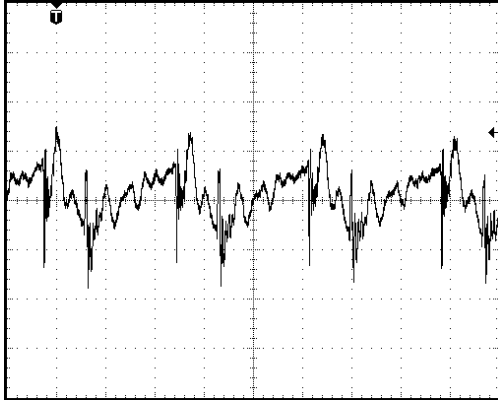
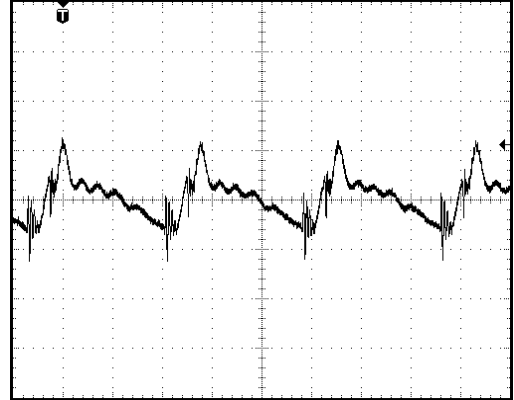


Technical Specifications		Model No.		QAW24S12-40		
All specifications are based on 25C, Nominal Line and Full Load unless otherwise noted. We reserve the right to change specifications based on technological advances.						
SPECIFICATION	Related condition		MIN	NOM	MAX	Unit Measured
			INPUT			
Turn on at				8.5		Volt DC
Turn off at				8.5		Volt DC
Input Over voltage Shutdown						
Turn off at				38.5		Volt DC
Turn on at				38		Volt DC
Operating Voltage Range	Rated Input Voltage		9	24	36	Volt DC
Maximum Input Current	Low Line 100% load			5.6		A
No Load Input Current				44		mA
Input Current under "LOGIC OFF"				2		mA
Inrush Current Transient Rating				1		A ² Sec
Reflected Ripple Current	20 MHz w/low source impedance			1140		mA
OUTPUT						
Output Voltage Set point			11.88	12	12.12	Volt DC
Output Voltage Regulation						
Over Load				± 1		%
Over Line				± 0.5		%
Over Temperature				0.2		% / °C
Output Voltage Ripple and Noise						
Basic Ripple				50	100	mV
Spikes P-P				100	100	mV
Output Current Ranges	Rated Output Current		0.333		3.333	A
Output Current Limit	Self Resetting		4.333	5	5.667	A
Short Term Output Current Surge						A/sec
Max Startup Capacitance	at 9Vdc in at 10Vdc in				320 440	μF μF
DYNAMIC CHARACTERISTICS						
Input Voltage Ripple Rejection	120 Hz			60		dB
Output Transient and Load Changes						
Load step / Δ V	X	50 to 75%		85		mV
Load step / Δ V	X	75 to 50%		80		mV
Recovery Time	To within 1% Rated Vo			240		μsec
Turn on Delay	From Vin(nom) to 90% Vout (nom)			210		msec
Overshoot of Output Voltage	Full Load Resistive			0		%
EFFICIENCY						
@ 100% load				81		%
@ 75% load				81		%
@ 50% load				81		%
@ 25% load				78		%
TEMPERATURE CONSIDERATIONS						
Thermal Resistance						
Normal Convection	R0c-a			5.47		°C/Watt
100 lfm						°C/Watt
200 lfm						°C/Watt
300 lfm						°C/Watt
400 lfm						°C/Watt
Heatsink Considerations	Available, Contact Factory					
General Technical Data						
Switching Frequency	Fixed			350		KHz
Remote ON OFF Control	Active HIGH, Open Collector					TTL
Trimmability			11.4		12.6	Volt DC
Over Temperature Shutdown	Case Temperature				105	°C
MTBF						
	Bellcore TR-332			3.51E6		Hours

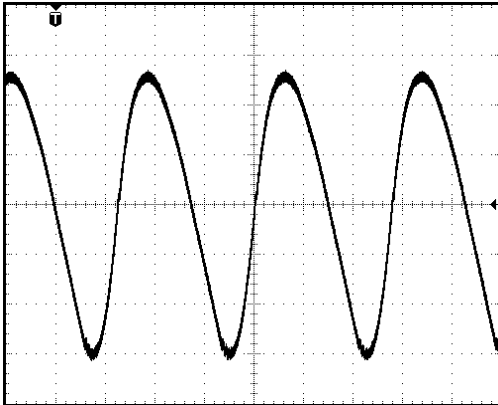




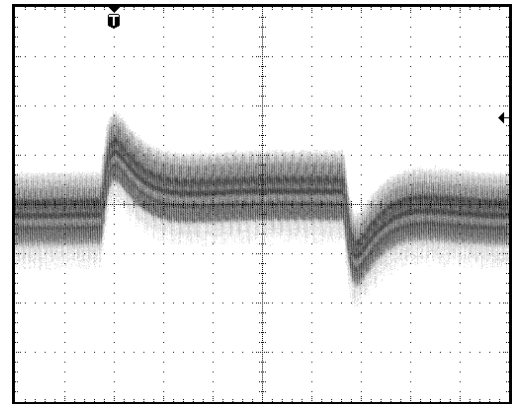
TYPICAL OUTPUT RIPPLE
 20mV/div, 1uS/div, full load, 9V_{in}
 0.1uF decoupling cap at room temp



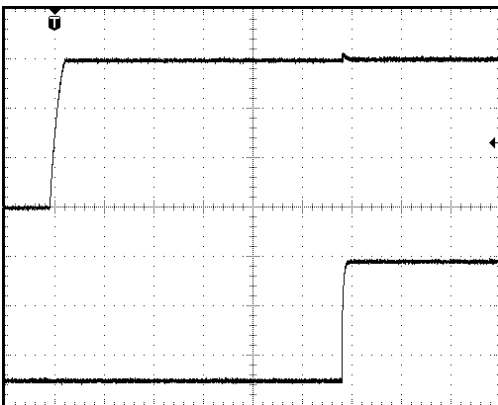
TYPICAL OUTPUT RIPPLE
 50mV/div, 1uS/div, full load 36V_{in}
 0.1uF decoupling cap at room temp



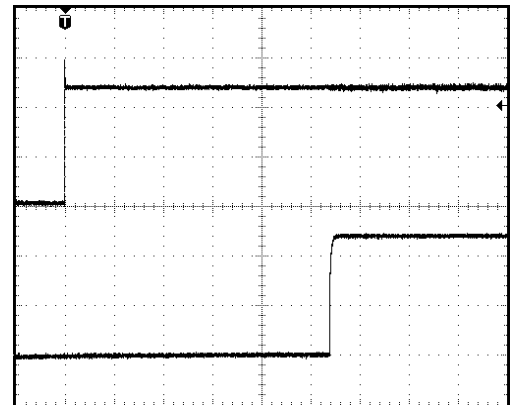
TYPICAL INPUT RIPPLE CURRENT
 200mA/div, 1uS/div, full load 24V_{in} at
 room temp with a low source impedance



TYPICAL TRANSIENT RESPONSE
 50mV/div, 200uS/div, 50% full load
 to 75% full load 24V_{in} room temp



TYPICAL RISE TIME & TURN-ON DELAY
 USING LOGIC ENABLE
 5V/div, 40mS/div (V_{out}), 2V/div 40mS/div (logic
 enable) 9V_{in}, full load at room temp



TYPICAL RISE TIME & TURN-ON DELAY
 WITH V_{in} 0-24V
 5V/div, 40mS/div (V_{out}), 10V/div, 40mS/div (V_{in})
 at room temp