



## Pulsed Power Amplifiers - type PA8590-42

### For Radar Applications

- High Power Output
- Integrated Power Supply - 18 to 32 Volt
- Connectors - SMA Female
- External Synchronization
- Variable Duty Cycle - up to 20%
- Fast Switching - 200 nanosecond
- Load VSWR protected

Parameter	Specifications
<b>Electrical Specifications</b>	
Frequency Range	8.5 to 9.0 GHz
Output Power	42 dBm Min. at 1 dB Compression 42.5 dBm Min. at Saturation (D.G. = 44.5 dBm)
Input Power	-13 ± 2 dBm
Maximum Input Power	+10 dBm for no damage
VSWR	2:1 Max at Input / 3:1 Max at Output
Load VSWR	+ ∞:1
Duty Cycle	20 % Max
Noise Figure	10 dB Max
Spurious	-50 dBc Max
Supply	18 to 32 Volt For Continuous Operation 16 to 34 Volt For Short Transient
External Sync	200 kHz ± 10 % TTL
DC Switching Control	TTL ("0" For Power "ON")
Switching Time From 50 % TTL	200 ns to 10% or 90% RF
Power Consumption	70 W Max at 20 % Duty Cycle
BIT Circuit	TTL ("0" < 35 dBm, "1" > 39 dBm)
RF Pulse Width	0.3µs to 30µs
PRF <sup>2</sup>	3 to 50 kHz
MTBF	30.000 Hours Min.
<b>Mechanical Specification:</b>	
Size	114 x 165 x 50 mm
Painting / Finishing	"Light admiralty grey" color as per 697 of BS 381
Connectors:	
RF	SMA-F For Input, SMA-F For Output
Control	D Type - 15 Pins

Parameter	Specifications
<b>DC Connector Pins Assignment</b>	
PIN 1	TTL Control ("0" = Power ON)
PIN 2	TTL Sync
PIN 3, 5	GND
PIN 4	TTL BIT
PIN 6, 7	Positive DC Input
<b>Environmental conditions:</b>	
Operating Temperature:	-40°C to 85°C
Storage Temperature	-50°C to 125°C

## Pulsed Power Amplifier - Mechanical Specification

