Technical Note TN-594

T889 PA De-rating from 90W to 70W

18 October 1999

Applicability

T889-10, T889-10-0000, T889-10-0600
T889 Series Power Amplifiers (PAs) (850-870MHz)

1. Introduction

Problem:

The T889 PA cannot continuously output 90W at high ambient temperatures for extended periods of time without folding back to approximately half this power output.

This can be a problem for trunking systems operating in high temperatures using the T889 PA on a control channel, which is required to continuously output full power at 100% duty cycle.

Solution:

The T889 PA has been de-rated from 90W to 70W power output to enable it to operate at a 100% duty cycle at high ambient temperatures.

2. Ambient Temperature

Definition:

In the graphs and data attached to this Technical Note, $T_{ambient} = 25\ ^{o}C$ means that the temperature of the air at the in-let to the fan attached to the PA should be 25 ^{o}C, not the temperature of the air entering a cabinet.

Further Information:

Tait Electronics Limited Radio Systems Division Engineers have extensively tested the T889 PA for an extended period.

If you require further detailed test data you can order the T889 Temperature Measurements data sheet by ordering:

IPN: 220-01326-04

Tait Electronics Limited
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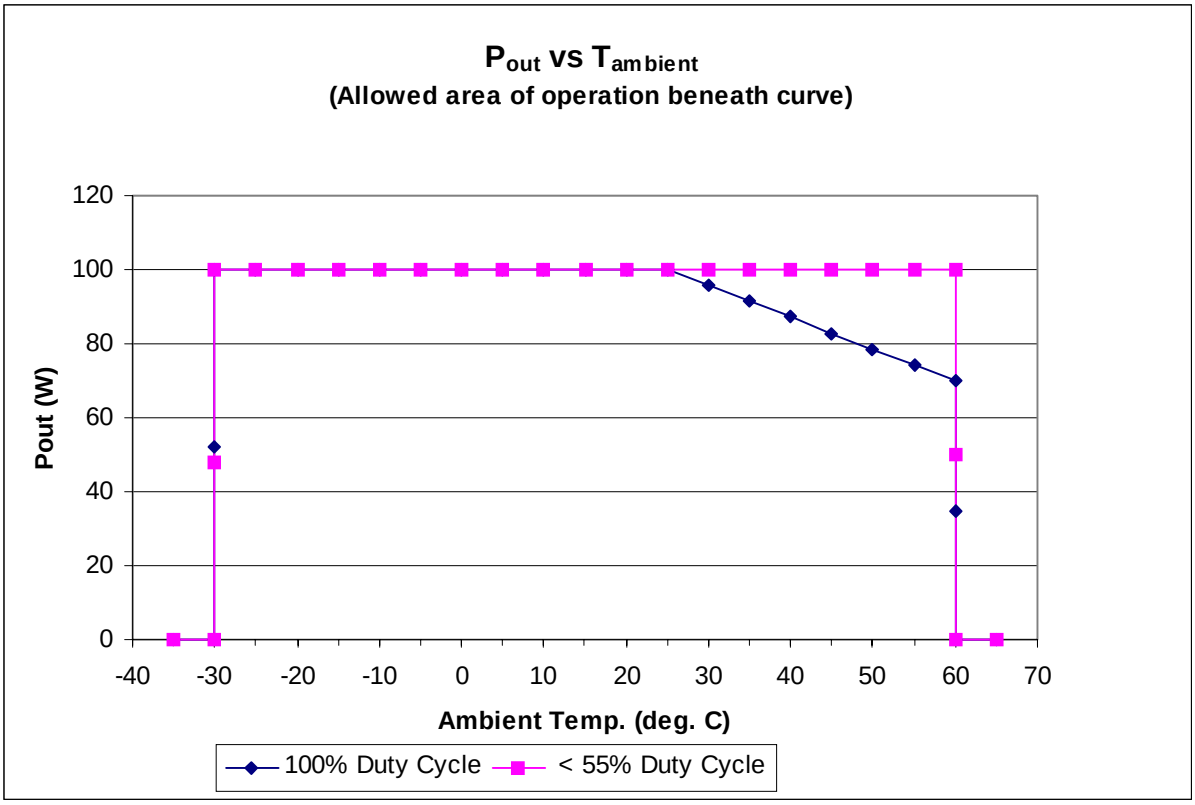
3. T889 Power Output vs Ambient Temperature



4. Issuing authority

Name and position of issuing officer John Crossland
RSD Documentation Manager

5. Amendment Record

Publication History

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Amendment History

Date	Amended Sections and Pages