ELECTRONIC TUBE REFERENCE

# F2057

Specialized - Traveling Wave electronic tube

CONSOLIDATED TECHNICAL DATA
**1 SECTION**
CONSTRUCTION
**TRAVELINGWAVE**

Rugged metal-envelope helix traveling-wave power amplifier with integral PPM focusing for broadband 2–4 GHz pulsed operation and kilowatt-class peak output.

## General characteristics

| | | | |
|---|---|---|---|
| **BASE DESIGNATION** | _ | **BASE PINS** | _ |
| **NOMINAL HEATER** | 6.3 V / 5 A | **PARALLEL HEATER** | _ / _ |
| **HEATING** | Indirect | **SERIES OPERATION** | Not specified |
| **CATHODE ARRANGEMENT** | Separate cathodes | **SECTION CONSTRUCTION** | Similar |

## Section ratings

**SECTION1** TravelingWave

| | |
|---|---|
| **MAXIMUM PLATE VOLTAGE** | 8000 V |
| **MAXIMUM CATHODE CURRENT** | 2 A |

The F2057 is a rugged metal-envelope helix traveling-wave power amplifier with integral PPM focusing, designed for pulsed microwave operation over 2–4 GHz.

SOURCE OPERATING CONDITIONS

# 1962 ITT

SOURCE PDF

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1962 ITT

## Section 1 · TravelingWave

| CHARACTERISTIC | | |
|---|---|---|
| **PARAMETER** | **PUBLISHED VALUE** | **CONDITION / NOTE** |
| Frequency Range | **2000–4000 MHz** | — |
| Heater Voltage | **6.3 V** | — |
| Heater Current | **5 A** | — |
| Gain | **30 dB** | — |
| Warm-up Time | **120 s** | — |

| OTHER | | |
|---|---|---|
| **PARAMETER** | **PUBLISHED VALUE** | **CONDITION / NOTE** |
| Maximum Anode Voltage | **8000 V** | — |
| Maximum Collector Voltage | **8000 V** | — |
| Maximum Cathode Current | **2 A** | Peak |
| Maximum RF Output Power | **30 W** | Average |
| Maximum Duty Cycle | **0.01** | — |
| Maximum Beam Pulse Width | **100 us** | — |
| Minimum Peak Output Power | **1000 W** | — |
| Cooling Airflow | **2 cfm** | — |

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