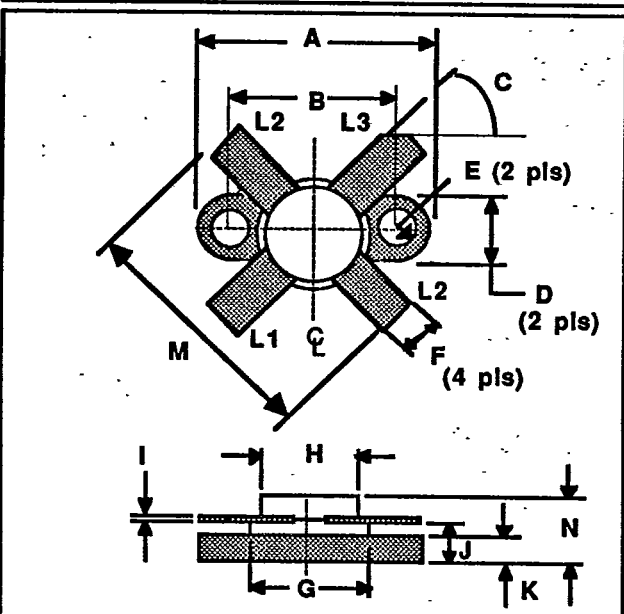


GENERAL DESCRIPTION

The S15-28 is designed for driver and output applications in the HF, 1.6-30 MHz range. It features state-of-the-art ruggedness and linearity and may be operated Class A, AB or C.

S15-28
15 WATTS - 28 VOLTS
1.5 - 30 MHZ

HF COMMUNICATIONS



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C Case Temperature **35 W**

Maximum Voltage and Current

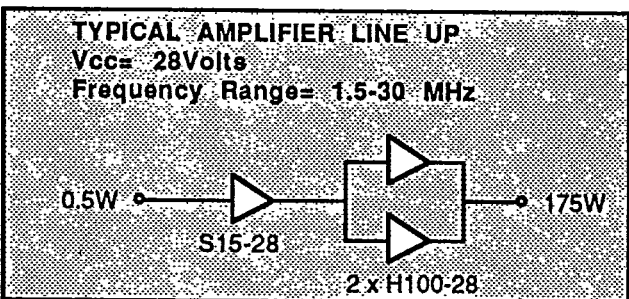
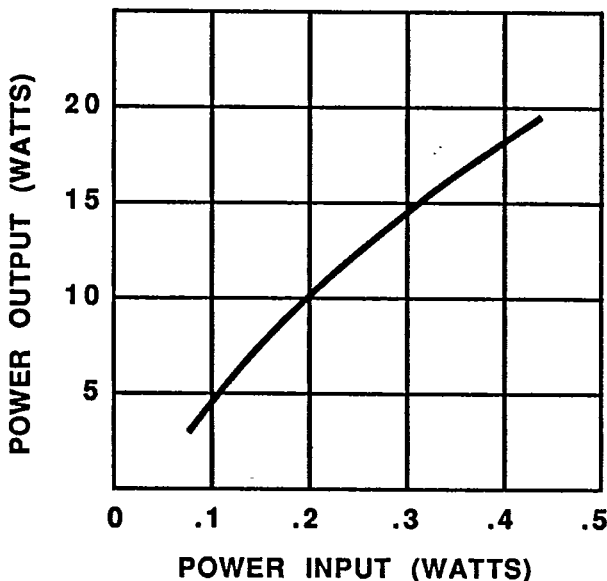
BVces Collector to Emitter Voltage **60 V**
 BVebo Emitter to Base Voltage **4.0 V**
 Ic Collector Current **2.0 A**

Maximum Temperatures

Storage Temperature **-65 to +150 °C**
 Operating Junction Temperature **+200 °C**

| DIM | Millimeter | TOL | Inches | TOL | |
|--------|------------|-------|--------|-------|------|
| L1 : B | A | 24.76 | .13 | .975 | .005 |
| L2 : E | B | 18.41 | .13 | .725 | .005 |
| L3 : C | C | 45° | 5° | 45° | 5° |
| | D | 6.35 | .13 | .250 | .005 |
| | E | 3.17 | .13 | .125 | .005 |
| | F | 5.69 | .13 | .224 | .005 |
| | G | 9.52 | .13 | .375 | .005 |
| | H | 8.63 | .13 | .340 | .005 |
| | I | 0.13 | .02 | .005 | .001 |
| | J | 4.32 | .13 | .170 | .005 |
| | K | 2.54 | .13 | .100 | .005 |
| | M | 25.55 | .25 | 1.006 | .010 |
| | N | 6.68 | REF | .263 | REF |

POWER OUTPUT VS POWER INPUT (TYPICAL)



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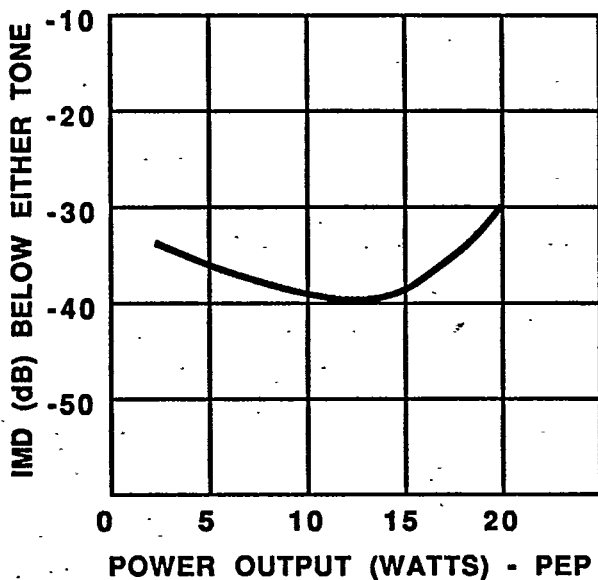
S15-28-2

ELECTRICAL CHARACTERISTICS¹

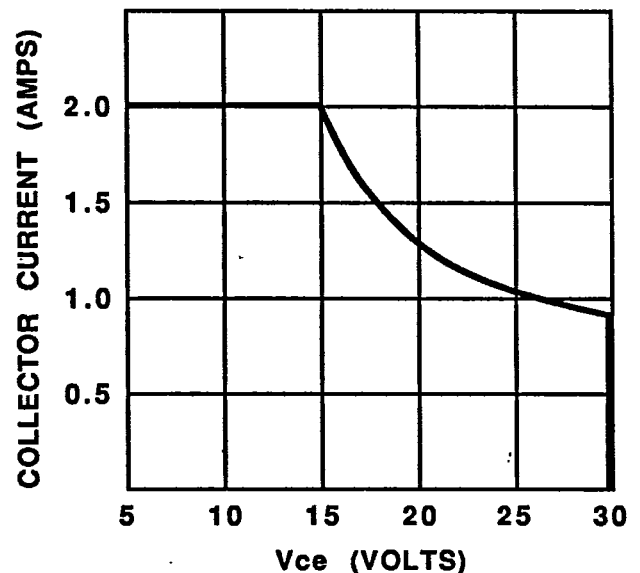
| SYMBOL | CHARACTERISTICS | TEST CONDITIONS | MIN. | TYP. | MAX. | UNITS |
|---------------|--|----------------------|------|------|------------|---------------|
| Pout | Power Output | f= 30MHZ Vcc= 28V | 15 | | | Watts |
| Pin | Power Input | | | | 0.5 | Watts |
| Pg | Power Gain | | 15 | | | dB |
| η_c | Collector Efficiency | | | 60 | | % |
| VSWR | Load Mismatch Tolerance | | | | $\infty:1$ | |
| BVebo | Breakdown Voltage (Emitter to Base) | Ic= 0A, Ie= 5mA | 4.0 | | | Volts |
| BVces | Breakdown Voltage (Collector to Emitter) | Vbe= 0A, Ic= 15mA | 60 | | | Volts |
| BVceo | Breakdown Voltage (Collector to Emitter) | Ib= 0A, Ic= 50mA | 33 | | | Volts |
| IMD | Intermodulation Distortion | 15W (PEP), f= 30 MHz | | -38 | -35 | dBc |
| Cob | Capacitance-Collector to Base | Vcb= 28V, f= 1 MHz | | 20 | | pF |
| h_{FE} | DC-Current Gain | Vce= 5V, Ic= 1A | 10 | | 100 | |
| θ_{jc} | Thermal Resistance | | | | 5 | $^{\circ}C/W$ |

Note 1: Tc = +25°C unless otherwise specified

IMD VS POWER OUTPUT (TYPICAL)



DC SAFE OPERATING AREA (TYPICAL)



SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

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