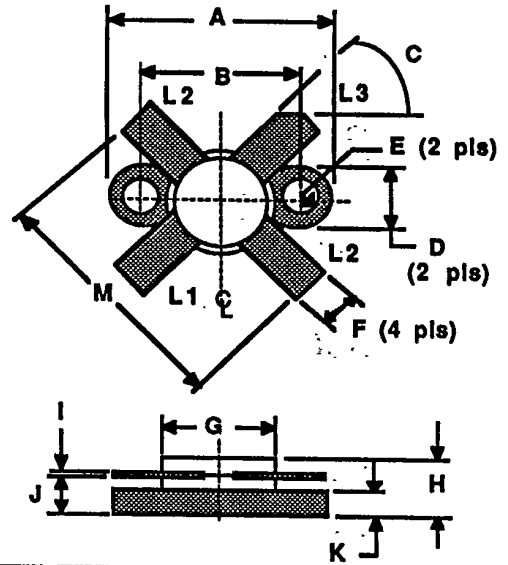


GENERAL DESCRIPTION

The FM 150 is specifically designed for Class C operation in the VHF FM broadcast band. Acrian's advanced design and process technologies insure rugged and reliable performance.

FM 150
150 WATTS - 28 VOLTS
88-108 MHz

FM BROADCAST



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C Case Temperature **165 W**

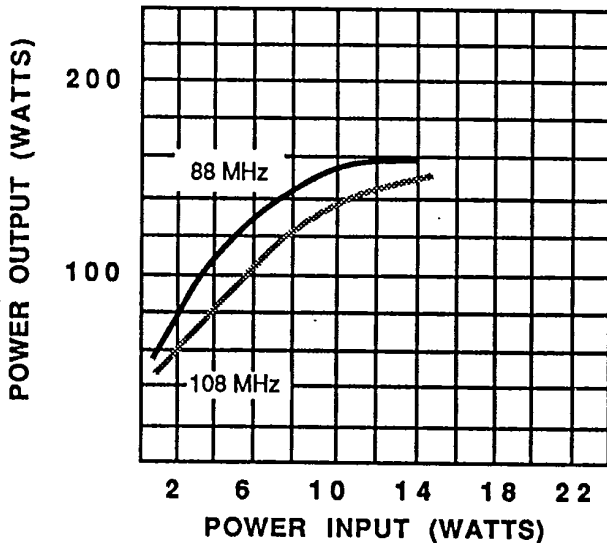
Maximum Voltage and Current

BVces Collector to Emitter Voltage **35 V**
 BVebo Emitter to Base Voltage **4.0 V**
 Ic Collector Current **16 A**

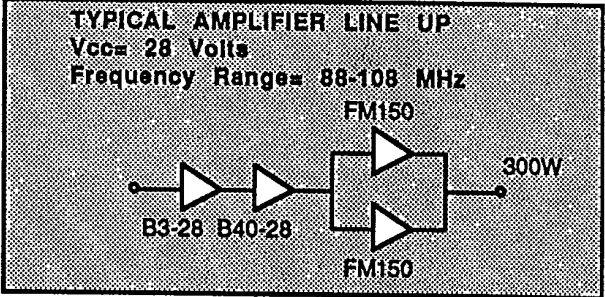
Maximum Temperatures

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

**POWER OUTPUT VS POWER INPUT
 (TYPICAL)**



DIM	Millimeter	TOL	Inches	TOL	
L1 : B	A	24.76	.13	.975	.005
L2 : E	B	18.42	.13	.725	.005
L3 : C	C	45°	5°	45°	5°
	D	6.35	.13	.250	.005
	E	3.17 DIA	.13	.125 DIA	.005
	F	5.71	.13	.225	.005
	G	12.70 DIA	.13	.500 DIA	.005
	H	6.60	REF	.260	REF
	I	0.13	.02	.005	.001
	J	4.19	.13	.165	.005
	K	2.59	.13	.102	.005
	M	25.40	.25	1.000	.010



FM150-2

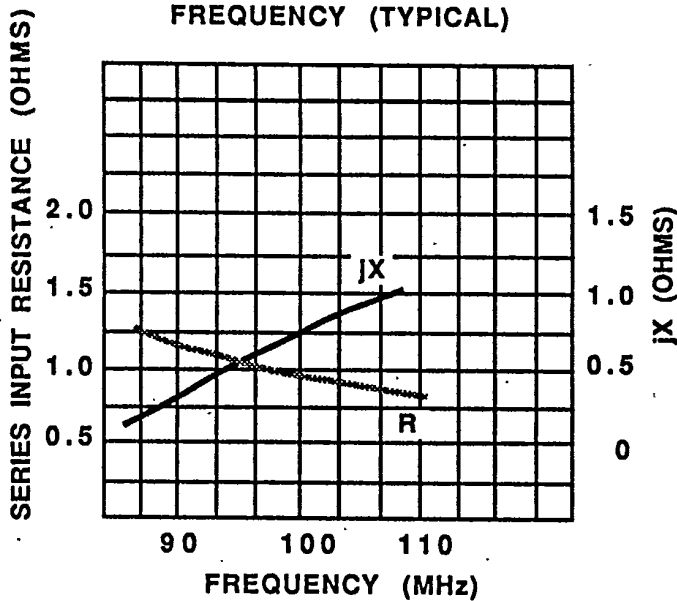
ELECTRICAL CHARACTERISTICS¹

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
P _{out}	Power Output	f= 108 MHz V _{cc} = 28V	150			Watts
P _{in}	Power Input				19	Watts
P _g ²	Power Gain		9	10		dB
η _c ²	Collector Efficiency		65			%
VSWR ²	Load Mismatch Tolerance				3:1	
BV _{ebo}	Breakdown Voltage (Emitter to Base)	I _c = 0A, I _e = 20mA	4.0			Volts
BV _{ceo}	Breakdown Voltage (Collector to Emitter)	I _b = 0A, I _c =100mA	25			Volts
BV _{cbo}	Breakdown Voltage (Collector - Base)	I _c = 100mA	60			Volts
C _{ob}	Capacitance-Collector to Base	V _{cb} = 28V, f= 1 MHz		140		pF
h _{FE}	DC-Current Gain	I _c = 1A, V _{ce} = 5V	20			
θ _{jc}	Thermal Resistance				1.1	°C/W

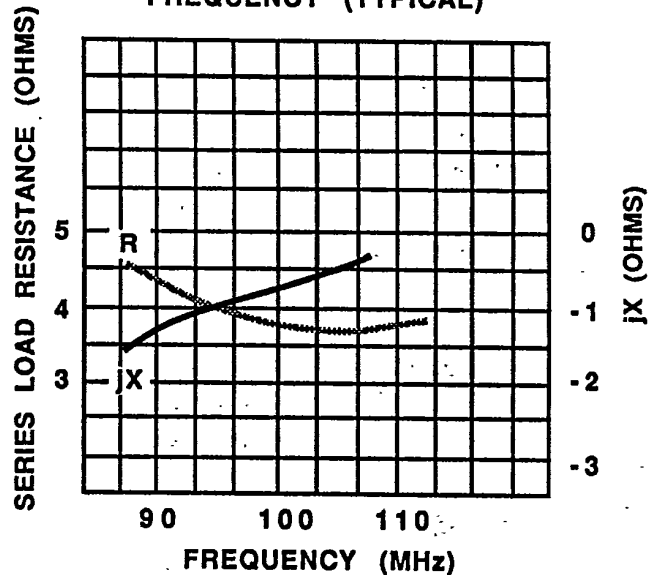
Note 1: T_c = +25°C unless otherwise specified

Note 2: At Rated Power Output

SERIES INPUT IMPEDANCE VS FREQUENCY (TYPICAL)



SERIES LOAD IMPEDANCE VS FREQUENCY (TYPICAL)



SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE