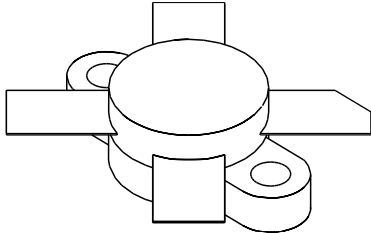

FM 150

150 Watts, 28 Volts
Broadcast 88 - 108 MHz

<p>GENERAL DESCRIPTION</p> <p>The FM 150 is a high power COMMON EMITTER bipolar transistor. It is designed for FM systems in the frequency band 88-108 MHz. The device has gold thin-film metallization and diffused ballasting for proven highest MTF. Surface passivation eliminates contamination and extends life. Low thermal resistance package reduces junction temperature, extends life.</p>	<p>CASE OUTLINE 55HT, STYLE 2</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 165 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Base Voltage 55 Volts BVebo Emitter to Base Voltage 4.0 Volts Ic Collector Current 16 Amps</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to + 150°C Operating Junction Temperature + 150°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 88-108 MHz	150			Watts
Pin	Power Input	Vcc = 28 Volts			19	Watts
Pg	Power Gain		9.0	10		dB
η_c	Collector Efficiency			65		%
VSWR	Load Mismatch Tolerance	F = 108 MHz			3:1	

BVebo	Emitter to Base Breakdown	Ie = 20 mA	4.0			Volts
BVceo	Collector to Emitter Breakdown	Ic = 100 mA	25			Volts
BVcbo	Collector to Base Breakdown	Ic = 100Ma	60			
Cob	Capacitance Collector to Base	Vcb = 28V		140		pF
h_{FE}	DC - Current Gain	Ic = 1A, Vce=5V	20			
θ_{jc}^1	Thermal Resistance				1.06	°C/W

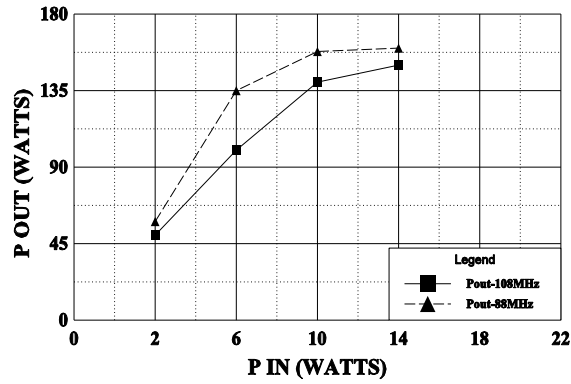
Note 1: Tc= + 25°C unless otherwise specified

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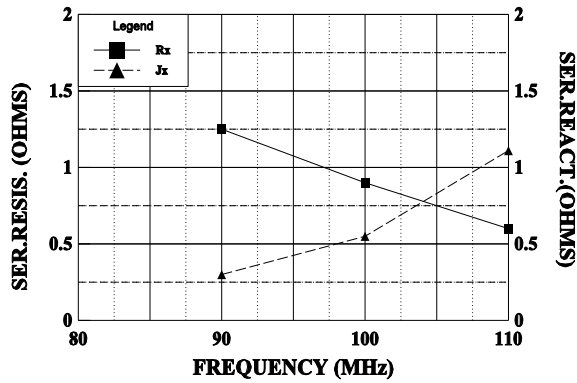
POWER OUTPUT vs POWER INPUT

Vcc = 28, Frequency 108 MHz



SERIES INPUT IMPEDANCE vs FREQUENCY

Vcc = 28V, Pin = 19W



SERIES LOAD IMPEDANCE vs FREQUENCY

Vcc = 28V, Pin = 19W

