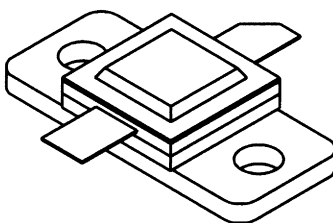


10AM20

20 Watts, 20 Volts, Class A
Linear to 1000 MHz

<p>GENERAL DESCRIPTION</p> <p>The 10AM20 is a COMMON EMITTER transistor capable of providing 20 Watts of Class A, RF output power to 1000 MHz. This transistor is specifically designed for general Class A amplifier applications. It utilizes gold metalization and diffused ballasting to provide high reliability and supreme ruggedness. The transistor uses a fully hermetic High Temperature Solder Sealed package.</p>	<p>CASE OUTLINE 55AT, STYLE 2</p>
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 63 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 50 Volts BVebo Emitter to Base Voltage 3.5 Volts Ic Collector Current 5.5 Amps</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to + 200°C Operating Junction Temperature + 200°C</p>	 <p>SEE NOTE BELOW</p>

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 1.0 GHz	20	24		Watts
Pin	Power Input	Ic = 2.8 A		3.0	4.5	Watts
Pg	Power Gain	Vcc = 20 Volts	6.5	7.0		dB
Ft	Transition Frequency	Vce = 22 V, Ic = 2.8 A				GHz
VSWR	Load Mismatch Tolerance				3:1	

BVebo	Emitter to Base Breakdown	Ie = 15 mA	3.5			Volts
BVces	Collector to Emitter Breakdown	Ic = 180 mA	50			Volts
BVceo	Collector to Emitter Breakdown	Ic = 180 mA	24			Volts
HFE	DC Current Gain	Vce = 5 V, Ic = 1.0 A	20	40		
Cob	Output Capacitance	Vcb = 28V, f=1.0 MHz				pF
θjc	Thermal Resistance			1.2	1.5	°C/W

Case Outline Note: During 1995 Ghz will be converting the 55AT style flange to the version using a slot in the mounting area, refer to 55AW.

