

23A003

0.3 Watts, 15 Volts, Class A
Linear to 2300 MHz

GENERAL DESCRIPTION

The 23A003 is a COMMON EMITTER transistor capable of providing 0.3 Watts of Class A, RF output power to 2300 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.

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C 3.0 Watts

Maximum Voltage and Current

BVces Collector to Emitter Voltage 50 Volts

BVebo Emitter to Base Voltage 3.5 Volts

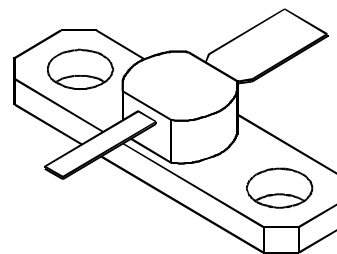
Ic Collector Current 0.3 Amps

Maximum Temperatures

Storage Temperature - 65 to + 200°C

Operating Junction Temperature + 200°C

CASE OUTLINE 55BT, STYLE 2 B08



ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 2.3 GHz	0.3			Watts
Pin	Power Input	Ic = 100 mA			0.03	Watts
Pg	Power Gain	Vcc = 15 Volts	10.0	11.0		dB
Ft	Transition Frequency	Vce = 15V, Ic = 100 mA	4.2	4.5		GHz
VSWR	Load Mismatch Tolerance				10:1	

BVebo	Emitter to Base Breakdown	Ie = 2 mA	3.5			Volts
BVces	Collector to Emitter Breakdown	Ic = 20 mA	50			Volts
BVceo	Collector to Emitter Breakdown	Ic = 20 mA	20			Volts
hFE	DC Current Gain	Vce = 5 V, Ic = 100 mA	20			
Cob	Capacitance	Vcb = 20V, f = 1 MHz		2.5		pF
θjc	Thermal Resistance				45	°C/W

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