

23A003

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

GENERAL DESCRIPTION

The23A003 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

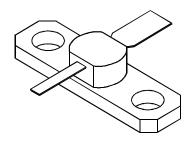
Maximum Power Dissipation @ 25°C 3.0 Watts

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 $-65 \text{ to} + 200^{\circ}\text{C}$ Operating Junction Temperature $+200^{\circ}\text{C}$ CASE OUTLINE 55BT, STYLE 2 B08



ELECTRICAL CHARACTERISTICS @ 25 °C

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

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

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