

# 23A017

1.7 Watts, 20 Volts, 280 mA  
Class A  
Linear to 2300 MHz

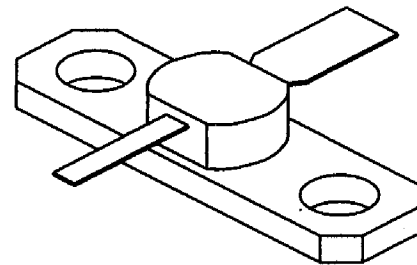
## GENERAL DESCRIPTION

The 23A017 is a COMMON EMITTER transistor capable of providing 1.7 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	6.0 Watts
<b>Maximum Voltage and Current</b>	
BVces Collector to Emitter Voltage	50 Volts
BVebo Emitter to Base Voltage	3.5 Volts
Ic Collector Current	800 mA
<b>Maximum Temperatures</b>	
Storage Temperature	- 65 to + 200°C
Operating Junction Temperature	+ 200°C

## CASE OUTLINE 55BT, STYLE 2



## ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 2.3 GHz	1.7	2.2		Watts
Pin	Power Input	Ic = 280 mA			.38	Watts
Pg	Power Gain	Vcc = 20 Volts	6.25	7.6		dB
Ft	Transition Frequency	Vce = 20V, Ic = 280 mA	3.4	3.7		GHz
VSWR	Load Mismatch Tolerance				9:1	

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	22			Volts
h <sub>FE</sub>	DC Current Gain	Vce = 5 V, Ic = 200 mA	20			
Cob	Capacitance	Vcb = 28V, f = 1 MHz		4.8		pF
θjc	Thermal Resistance			14	16	°C/W