



BYI-1/1F/1T/1Z

BYISTORS FOR LINEAR POWER AMPLIFIERS

GENERAL DESCRIPTION	CASE OUTLINE
The BYI-1/1F/1T/1Z is a semiconductor device specifically designed for use in linear amplifier bias circuitry. The byistor acts as a low impedance D.C. bias source which has two modes for thermal compensation.	
ABSOLUTE MAXIMUM RATINGS	
Maximum Power Dissipation @ 25°C	11 Watts
Maximum Voltage and Current	
BVces Collector to Emitter Voltage	55 Volts
BVebo Emitter to Base Voltage	4.0 Volts
Ic Collector Current	0.7 A
Maximum Temperatures	
Storage Temperature	- 65 to +150°C
Operating Junction Temperature	+150°C

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Output	F = 400 MHz	3		0.2	Watts
Pin	Power Input	Vcc = 28 Volts	11.8	13	60	Watts
Pg	Power Gain					dB
ηe	Efficiency					%
VSWR	Load Mismatch Tolerance				30:1	

BVebo	Emitter to Base Breakdown	Ie = 5 mA	4.0			Volts
BVces	Collector to Emitter	Ic = 20 mA	55			Volts
BVceo	Breakdown	Ie = 50 mA	30			Volts
BVcbo	Collector to Emitter	Ic = __ mA				Volts
Iebo	Breakdown	Vc = __ Volts				mA
Cob	Collector to Base Breakdown	Vcb = 28 V, F = 1				pF
h _{FE}	Collector to Base Current	MHz	4.5	45	150	
θjc	Output Capacitance	Vce = 5 V, Ic = 100 A	10		16	°C/W
	DC - Current Gain					
	Thermal Resistance					

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