

GAE

GREAT AMERICAN ELECTROINCS

B2-8Z

Silicon NPN power VHF transistor B2-8Z is designed for 8 volt power amplifier applications in communication equipment. Especially suited for portable transceivers where low battery voltage is used.

Output Power: 2 Watt
Frequency Range: 50-200 Mhz
Voltage: 8 V
Package Type: 8/32 Helicopter

Electrical Characteristics ($T_{CASE}=40^{\circ}C$)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
P_{out}	$f_o = 175 \text{ Mhz}/V_{cc}=8V/P_{IN}=0.2W$	2			W
G_p	$f_o = 175 \text{ Mhz}/V_{cc}=8V/P_{out}=2W$	10			dB
λ_c	$f_o = 175 \text{ Mhz } V_{cc}=8V/P_{out}=2W$	60	72		%
$C_{o\beta}$	$f = 5 \text{ Mhz } V_{CB} = 8V$		15	20	pF

ABSOLUTE MAXIMUM RATINGS ($T_{CASE} = 25^{\circ}C$)

SYMBOL	PARAMETERS	VALUE	UNIT
V_{CER}	Collector-Emitter Voltage, $R_{EB}=100\Omega$	30	V
V_{EBO}	Emitter-Base Voltage	3	V
I_c	Continuous Collector Current	0.8	A
P_C	Collector Power Dissipation	6*	W
T_j	Junction Temperature	160	$^{\circ}C$
$R_{th(j-c)}$	Junction-Case Thermal Resistance	20	$^{\circ}C/W$

*For Dynamic Operation, $T_{CASE} = 40^{\circ}C$