

GAE

GREAT AMERICAN ELECTROINCS

BAL0105-50

Silicon NPN high power UHF transistor BAL0105-50 (transistor assembly) is designed for wideband push-pull power, large signal output, and driver amplifier stages in the 100-500 Mhz frequency range. Suitable for use in A, AB, B, C

Output Power: 50 Watt
Frequency Range: 100-500 Mhz
Voltage: 28 V
Package Type: SOT-161 (8 Lead Module)
Common Emitter Configuration
Emitter Ballasting
Internally Matched Input

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
P_{out}	$f_o = 500 \text{ Mhz}/V_{cc}=28\text{V}/P_{IN}=12.5\text{W}$	50			W
G_p	$f_o = 500 \text{ Mhz}/V_{cc}=28\text{V}/P_{out}=50\text{W}$	6			dB
λ_c	$f_o = 500 \text{ Mhz}/V_{cc}=28\text{V}/P_{out}=50\text{W}$	50	55	70	%

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

SYMBOL	PARAMETERS	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	55	V
V_{EBO}	Emitter-Base Voltage	4	V
I_c	Continuous Collector Current	4	A
P_C	Collector Power Dissipation	64*	W
T_j	Junction Temperature	160	$^{\circ}\text{C}$
$R_{th(j-c)}$	Junction-Case Thermal Resistance	1.25	$^{\circ}\text{C}/\text{W}$

*For Dynamic Operation, $T_{CASE} = 80^{\circ}\text{C}$

■ 3288292 0000028 019 ■