GAE GREAT AMERICAN ELECTROINCS

SG971

Silicon NPN power VHF transistor SG971 is designed for wide band large signal output and driver amplifier stages of transceiver communication equipment in severe mismatch conditions.

Output Power:	150 Watt
Frequency Range:	50-200 Mhz
Voltage:	28 V
Package Type:	SOT-119

Electrical Characteristics (T_{CASE}=40°C)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
P_{out}	f_o = 175 Mhz/V_{cc}=28V/P_{IN}=50W	150			W
G_p	f_o = 175 Mhz/V_{cc}=28V/P_{out}=150W	5			dB
λ_C	f_o = 175 Mhz /V_{cc}=28V/P_{out}=150W	55	75	84	%

ABSOLUTE MAXIMUM RATINGS (T_{CASE} = 25°C)

SYMBOL	PARAMETERS	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	4	V
Ic	Continuous Collector Current	17	A
P_C	Collector Power Dissipation	200*	W
T_j	Junction Temperature	160	°C
R_{th}(j-c)	Junction-Case Thermal Resistance	0.6	°C/W

*For Dynamic Operation, T_{CASE} = 40°C