

GAE GREAT AMERICAN ELECTROINCS

2N5590/B12-12

Silicon NPN power VHF transistor 2N5590/B12-12 is designed for amplifier, frequency multipliers and oscillator applications in industrial and commercial equipment. Especially suited for AM/FM land and mobile operation.

Output Power: 5 Watt
 Frequency Range: 50-200 Mhz
 Voltage: 12.6 V
 Package Type: MT-72
 Common Emitter Configuration
 NiChrome Emitter Resistors
 Aluminum Metalization

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
P_{out}	$f_o = 175 \text{ Mhz}/V_{cc}=12.5V/P_{IN}=0.82W$	5			W
G_p	$f_o = 175 \text{ Mhz}/V_{cc}=12.6V/P_{out}=2W$	6			dB
λ_c	$f_o = 175 \text{ Mhz}/V_{cc}=12.6V/P_{out}=2W$	60	72		%

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

SYMBOL	PARAMETERS	VALUE	UNIT
V_{CER}	Collector-Emitter Voltage $R_{EB} \leq 100\Omega$	36	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Continuous Collector Current	1	A
P_C	Collector Power Dissipation	10*	W
T_j	Junction Temperature	150	$^{\circ}C$
$R_{th(j-c)}$	Junction-Case Thermal Resistance	10	$^{\circ}C/W$

*For Dynamic Operation, $T_{CASE} = 50^{\circ}C$