

GAE**GREAT AMERICAN ELECTROINCS****2N5177**

Silicon NPN high power UHF transistor 2N5177 is designed for power amplifier, frequency multiplier or auto-oscillator applications in industrial equipment (class C).

Output Power: 20 Watt(typ)
 Frequency Range: 100-500 Mhz
 Voltage: 28 V
 Package Type: FO-85
 Common Emitter Configuration
 Ballast Emitter Resistors
 Aluminum Metalization

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
P_{out}	$f_o = 500 \text{ Mhz} / V_{CC} = 28V / P_{IN} = 10W$	17	20	25	W
G_p	$f_o = 500 \text{ Mhz} / V_{CC} = 28V / P_{out} = 20W$	3			dB
λ_c	$f_o = 500 \text{ Mhz} / V_{CC} = 28V / P_{out} = 10W$	45	55		%

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

SYMBOL	PARAMETERS	VALUE	UNIT
V_{CER}	Collector-Emitter Voltage $R_{EB} \leq 10 \Omega$	60	V
V_{EBO}	Emitter-Base Voltage	3.5	V
I_C	Continuous Collector Current	2	A
P_C	Collector Power Dissipation	27*	W
T_j	Junction Temperature	160	$^{\circ}C$
$R_{th(j-c)}$	Junction-Case Thermal Resistance	5	$^{\circ}C/W$

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