

SGI**Silicon Group Inc.****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 volt
Package type: FO85
Common Emitter Configuration
Ballast Emitter Resistors
Aluminum Metalization

ELECTRICAL CHARACTERISTICS (T_{CASE} = 40° C)

SYMBOL	TEST CONDITIONS	VALUE			UNIT
		MIN.	TYP.	MAX.	
P _{OUT}	f _o = 500 MHz / V _{cc} = 28 V / P _{IN} = 10W	17	20	25	W
G _p	f _o = 500 MHz / V _{cc} = 28 V / P _{OUT} = 20W	3			dB
λ _c	f _o = 500 MHz / V _{cc} = 28 V / P _{OUT} = 10W	45	55		%

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

Symbol	PARAMETERS	VALUE	UNIT
V _{CER}	Collector - Emitter Voltage R _{EB} ≤ 10Ω	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	°C
R _{th(j-c)}	Junction-Case Thermal Resistance	5	°C/W

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