

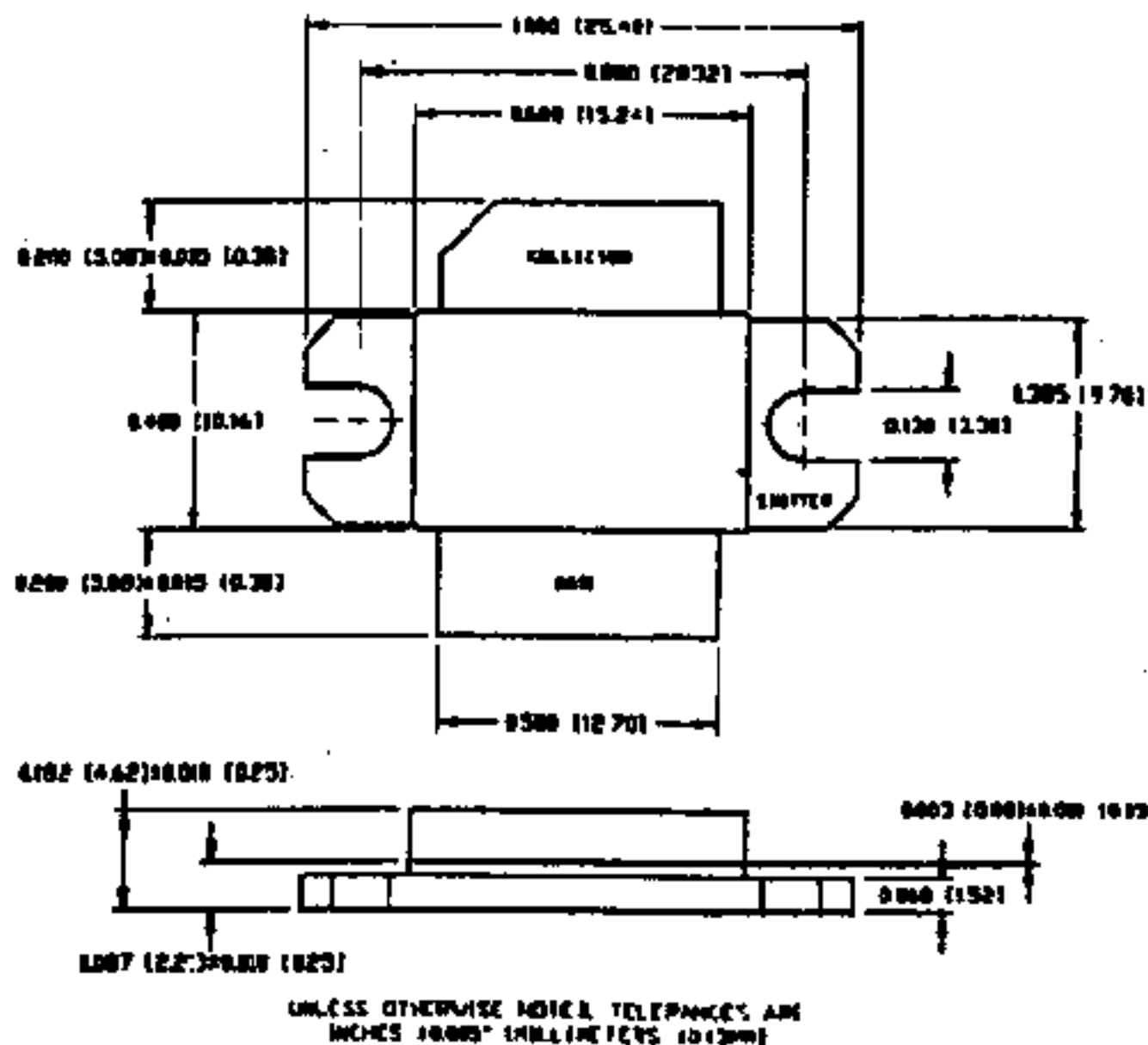


PH1920-60 PRELIMINARY
WIRELESS POWER TRANSISTOR
60 WATTS, 1930-1990 MHz

FEATURES

- NPN Silicon Microwave Power Transistor
- Common Emitter Class AB Operation
- Internal Input and Output Impedance Matching
- Diffused Emitter Ballasting
- Gold Metallization System

OUTLINE DRAWING



ABSOLUTE MAXIMUM RATINGS AT 25°C

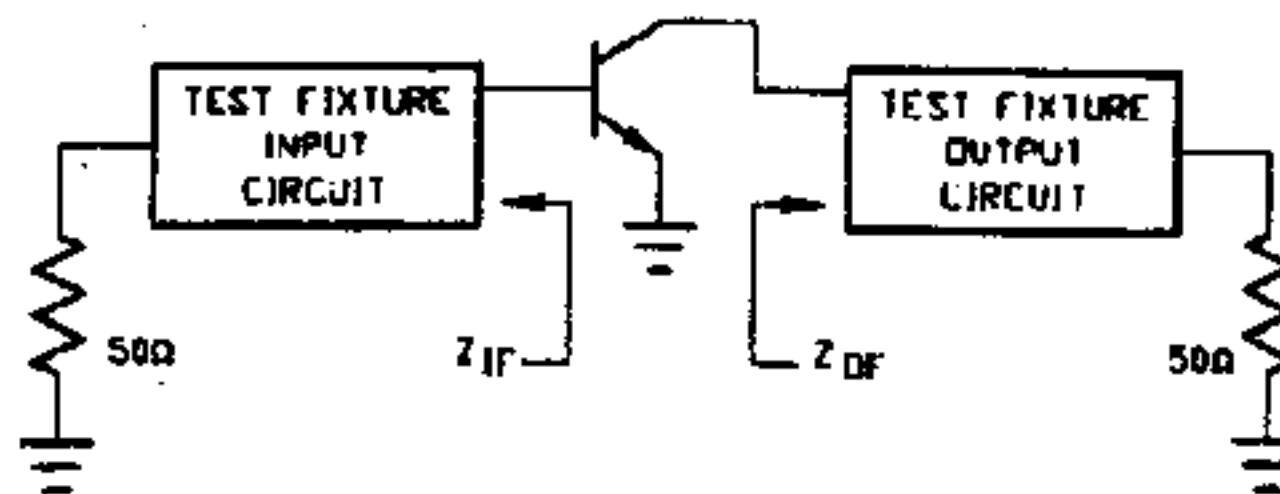
Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	20	V
Collector-Emitter Voltage	V_{CES}	65	V
Emitter-Base Voltage	V_{EBO}	3.0	V
Collector Current	I_C	tbd	A
Power Dissipation	P_D	tbd	W
Storage Temperature	T_{STG}	-85 to +160	°C
Junction Temperature	T_J	200	°C
Thermal Resistance	θ_{JC}	1.0	°C/W

ELECTRICAL CHARACTERISTICS AT 25°C

Parameter	Symbol	Min	Max	Units	Test Conditions
Power Gain	G_p	6.0	-	dB	$V_{CC}=28$ V, $I_{CC}=260$ mA, $P_{OUT}=60$ W, $F=1930, 1990$ MHz
Collector Efficiency	η_o	40	-	%	$V_{CC}=28$ V, $I_{CC}=260$ mA, $P_{OUT}=60$ W, $F=1930, 1990$ MHz
Input Return Loss	RL	10	-	dB	$V_{CC}=28$ V, $I_{CC}=260$ mA, $P_{OUT}=60$ W, $F=1930, 1990$ MHz
Load Mismatch Tolerance	VSWR-T	-	2:1	-	$V_{CC}=28$ V, $I_{CC}=260$ mA, $P_{OUT}=60$ W, $F=1930, 1990$ MHz

BROADBAND TEST FIXTURE IMPEDANCES

Freq (MHz)	Z_{IF} (Ω)	Z_{OF} (Ω)
1930	0.80 - j2.8	2.6 - j1.30
1960	0.80 - j2.7	2.8 - j1.20
1990	0.80 - j2.7	3.0 - j1.20



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