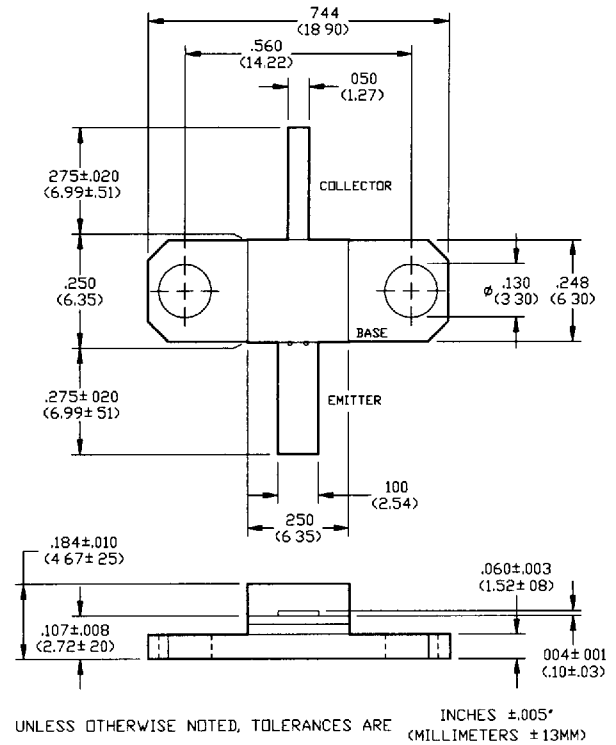




Features

- CW Operation
- Internal Impedance Matching
- Common Base Configuration
- Multilayer Metal / Ceramic Package
- Gold Metallization System

Outline Drawing



Absolute Maximum Ratings at 25°C

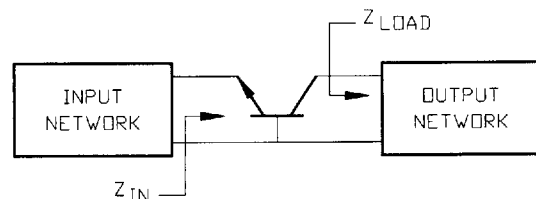
Parameter	Symbol	Rating	Units
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CES}	60	V
Emitter-Base Voltage	V_{EBO}	3.0	V
Collector Current	I_C	3	A
Power Dissipation	P_D	80	W
Junction Temperature	T_J	200	°C
Storage Temperature	T_{STG}	-55 to +150	°C
Thermal Resistance	θ_{JC}	2.5	°C/W

Electrical Characteristics at 25°C

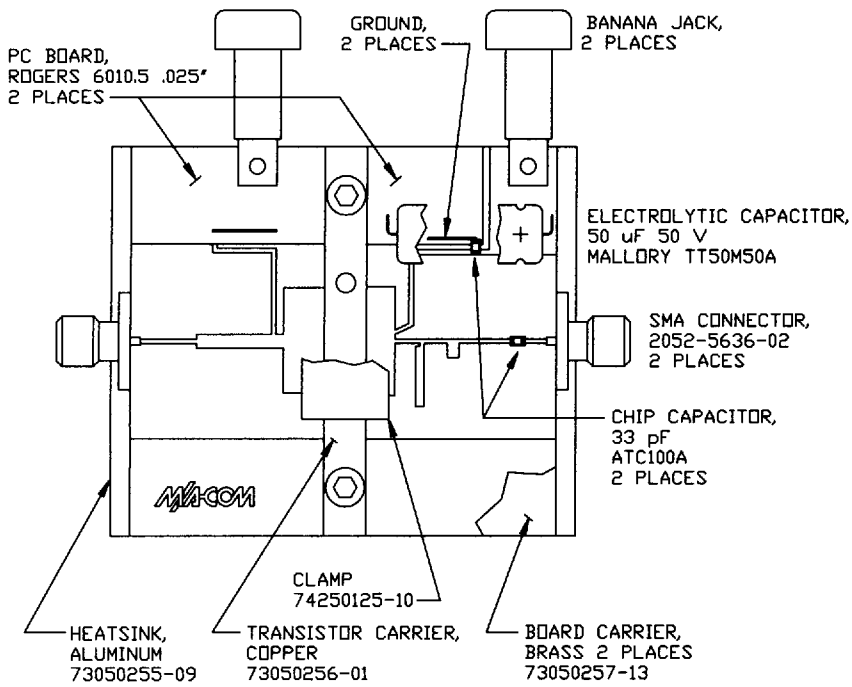
Parameter	Symbol	Min	Max	Units	Test Conditions
Collector-Emitter Breakdown Voltage	BV_{CES}	60	-	V	$I_C=30$ mA
Collector-Emitter Leakage Current	I_{CES}	-	3.0	mA	$V_{CE}=28$ V
Emitter-Base Breakdown Voltage	BV_{EBO}	3.0	-	V	$I_B=2.5$ mA
DC Forward Current Gain	h_{FE}	15	120	-	$V_{CE}=5$ V, $I_C=500$ mA
Power Gain	G_P	7	-	dB	$V_{CC}=28$ V, $P_{OUT}=30$ W, $F=1.55, 1.60, 1.65$ GHz
Collector Efficiency	η_C	45	-	%	$V_{CC}=28$ V, $P_{OUT}=30$ W, $F=1.55, 1.60, 1.65$ GHz
Input Return Loss	RL	10	-	dB	$V_{CC}=28$ V, $P_{OUT}=30$ W, $F=1.55, 1.60, 1.65$ GHz
Load Mismatch Tolerance	VSWR-T	-	5.0:1	-	$V_{CC}=28$ V, $P_{OUT}=30$ W, $F=1.55, 1.60, 1.65$ GHz

Typical Device Impedances

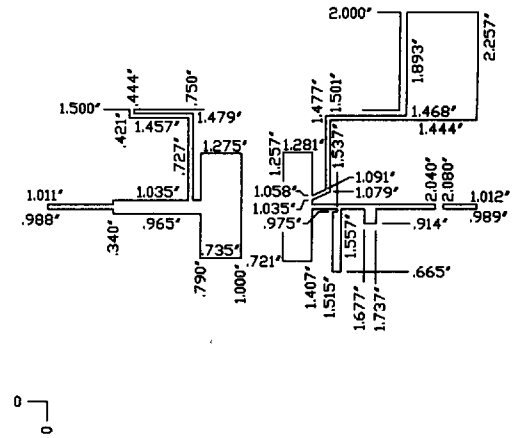
F(GHz)	$Z_{IN}(\Omega)$	$Z_{LOAD}(\Omega)$
1.55	$3.3 + j4.8$	$5.8 - j6.0$
1.60	$3.3 + j4.6$	$5.8 - j5.8$
1.65	$3.3 + j4.3$	$6.0 - j5.6$



Broadband Test Fixture Electrical Schematic



T O P V I E W



C I R C U I T D I M E N S I O N S