

# M/A-COM CW Power Transistor

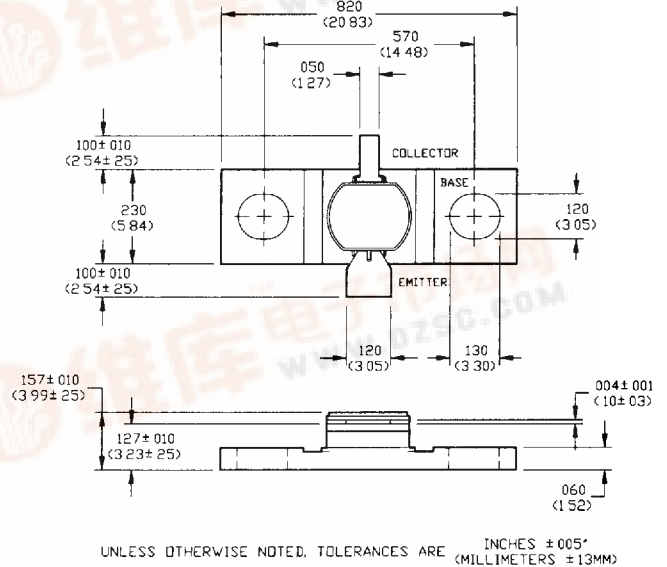
PH2323-6

Preliminary  
6.0 Watts, 2.30 GHz

## Features

- NPN Silicon Microwave Power Transistor
- Common Base Configuration
- Class C Operation
- Interdigitated Geometry
- Diffused Emitter Ballasting Resistors
- Gold Metallization System
- Hermetic Metal/Ceramic Package

## Outline Drawing



## Absolute Maximum Ratings at 25°C

Parameter	Symbol	Rating	Units
Collector-Emitter Voltage	$V_{CES}$	60	V
Emitter-Base Voltage	$V_{EBO}$	3.0	V
Collector Current	$I_C$	0.8	A
Power Dissipation	$P_D$	25	W
Junction Temperature	$T_J$	200	°C
Storage Temperature	$T_{STG}$	-65 to +200	°C
Thermal Resistance	$\theta_{JC}$	7.0	°C/W

## Electrical Characteristics at 25°C

Parameter	Symbol	Min	Max	Units	Test Conditions
Collector-Emitter Breakdown Voltage	$BV_{CES}$	60	-	V	$I_C=10\text{ mA}$
Collector-Emitter Leakage Current	$I_{CES}$	-	2.0	mA	$V_{CE}=28\text{ V}$
Output Power	$P_{OUT}$	6.0	-	W	$V_{CC}=28\text{ V}, P_{IN}=0.760\text{ W}, F=2.3\text{ GHz}$
Power Gain	$G_P$	9.0	-	dB	$V_{CC}=28\text{ V}, P_{IN}=0.760\text{ W}, F=2.3\text{ GHz}$
Collector Efficiency	$\eta_C$	40	-	%	$V_{CC}=28\text{ V}, P_{IN}=0.760\text{ W}, F=2.3\text{ GHz}$
Input Return Loss	RL	6	-	dB	$V_{CC}=28\text{ V}, P_{IN}=0.760\text{ W}, F=2.3\text{ GHz}$
Load Mismatch Tolerance	VSWR-T	-	3:1	-	$V_{CC}=28\text{ V}, P_{IN}=0.760\text{ W}, F=2.3\text{ GHz}$

