

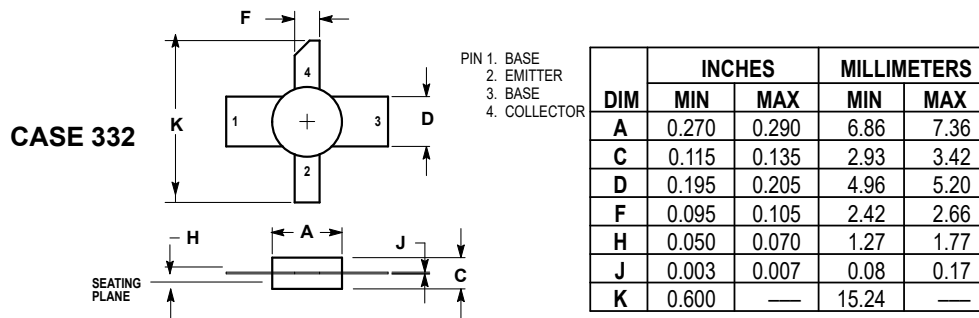
## DESCRIPTION

Designed for Class B and C common base amplifier applications in short pulse TACAN, IFF, and DME transmitters.

## FEATURES

- Specified 50V, 1090MHz Characteristics
- $P_o = 90W$  PEP@50V, 1090MHz
- $G_P = 8.4$  dB (Min) @50V, 1090MHz
- VSWR = 10:1
- Omnigold™ Metalization System

## DIMENSIONS



## MAXIMUM RATINGS

CHARACTERISTICS	SYMBOL	RATINGS	UNITS
Collector-Base Voltage	$V_{CBO}$	70	V
Collector-Emitter Voltage	$V_{CES}$	70	V
Collector Current	$I_C$	6.0	A
Emitter-Base Voltage	$V_{EBO}$	4.0	V
Collector Power Dissipation	$P_{DISS}$	290	W
Storage Temperature Range	$T_{STG}$	-65 to 150	°C

## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=25mA, I_E=0$	70	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C=25mA, V_{BE}=0$	70	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=5mA, I_C=0$	4.0	-	-	V
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 50V, I_E = 0$	-	-	5	mA
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=2.5A$	10	70	-	
Power Gain	$G_P$	$V_{CC}=50V, P_{OUT}=90W,$	8.4	10.8	-	dB
Collector Efficiency	$\eta_C$	$f=1090MHz$	35	40	-	%
Collector Output Capacitance	$C_{ob}$	$V_{CB}=50V, I_E=0$ $f=1MHz$	-	12	16	pF