

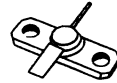
### FEATURES

- Gold metallization
- Auto-aligned and glass-passivated structure
- Hermetical ceramic metal package
- Common emitter structure

### APPLICATIONS

Transistor for telecommunications,  
used as class A amplifier

$f = 3 \text{ GHz}$   
 $P_{OUT} = 160 \text{ mW}$   
 $GP = 8 \text{ dB}$   
 $V_{CC} = 12 \text{ V}$   
 $I_C = 60 \text{ mA}$



Case : CB - 294 (.250 2L FL) \*

ABSOLUTE RATINGS (LIMITING VALUES)	Symbols	Values	Units
Emitter-base (d.c.) voltage	VEBO	1,5	V
Collector-base (d.c.) voltage	VCBO	30	V
Collector-emitter (d.c.) voltage	VCEO	15	V
Collector current (d.c.)	$I_C$	200	mA
Total power dissipation	$P_{tot}$	**	W
Storage and junction temperatures	$T_{stg}$	- 55 → + 200	°C
	$T_j$	- 55 → + 175	°C

Thermal resistance (junction-case)	$T_{case} = 25^\circ\text{C}$ $V_{CE} = 12 \text{ V}$ $I_C = 60 \text{ mA}$	$R_{th} (j-c)$	45	°C/W
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\* Package available with or without flange, ceramic or metallic cap. Standard part uses metallic cap.  
 \*\* See safe area.

January 1982 - 1/6

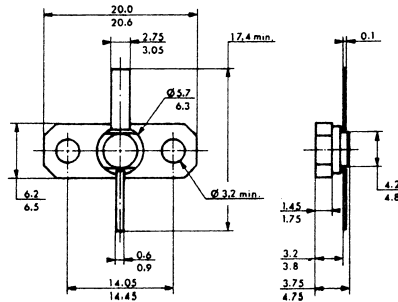
STATIC CHARACTERISTICS at  $T_{amb} = 25^{\circ}\text{C}$   
 CARACTERISTIQUES STATIQUES à  $T_{amb} = 25^{\circ}\text{C}$

Symbols	Values			Units	Test conditions	
	min.	typ.	max.			
$I_{CBO}$			5	mA	$V_{CB} = 30\text{ V}$	$I_E = 0$
$I_{CEO}$			5	mA	$V_{CE} = 15\text{ V}$	$I_B = 0$
$I_{EBO}$			1	mA	$V_{BE} = 1,5\text{ V}$	$I_C = 0$
HFE	15		120		$I_C = 60\text{ mA}$	$V_{CE} = 12\text{ V}$
CCOB		2,5		pF	$V_{CB} = 12\text{ V}$	$f = 1\text{ MHz}$

DYNAMIC CHARACTERISTICS at  $T_{amb} = 25^{\circ}\text{C}$   
 CARACTERISTIQUES DYNAMIQUES à  $T_{amb} = 25^{\circ}\text{C}$

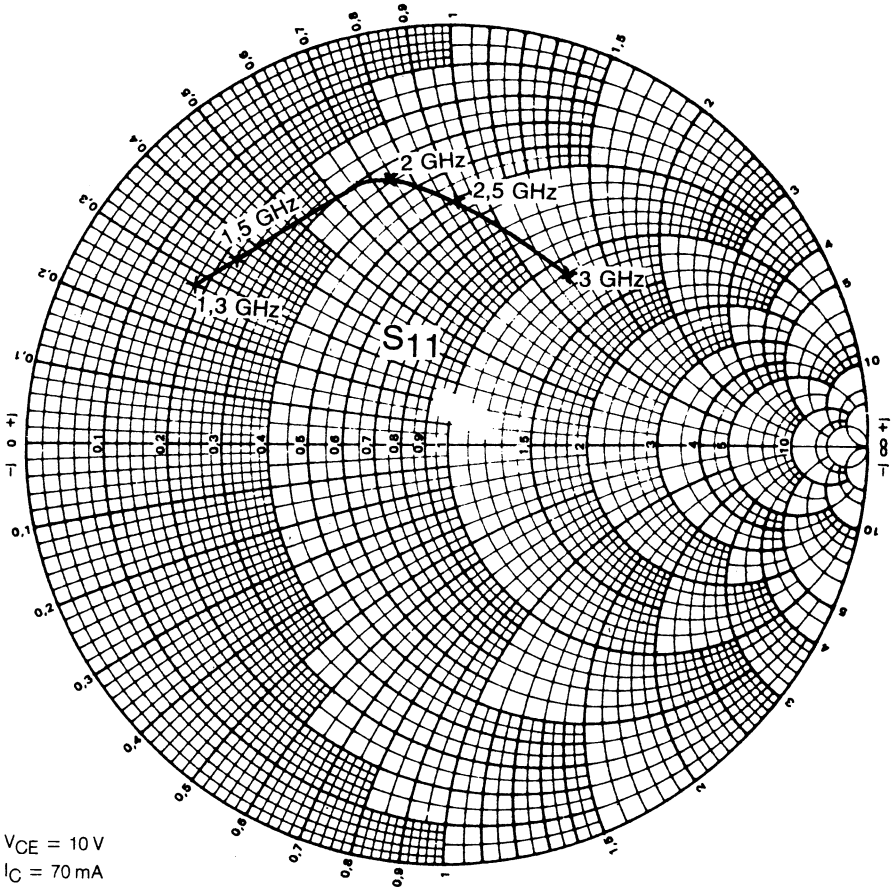
Symbols	Values			Units	Test conditions		
	min.	typ.	max.				
Gp	7	8		dB	$f = 3\text{ GHz}$ $V_{CE} = 12\text{ V}$ $I_C = 60\text{ mA}$		
POUT - 1 dB compression		22		dBm			
Third order intercept point		30		dBm			
$f_T$		5		GHz	$V_{CE} = 12\text{ V}$	$I_C = 60\text{ mA}$	

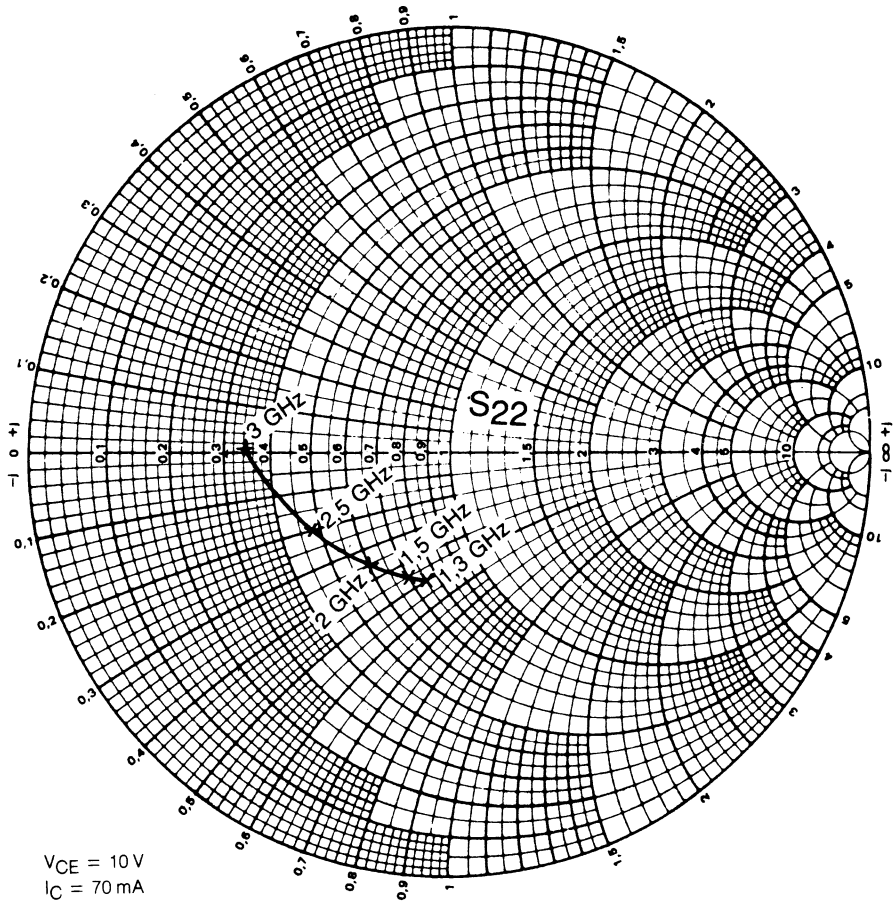
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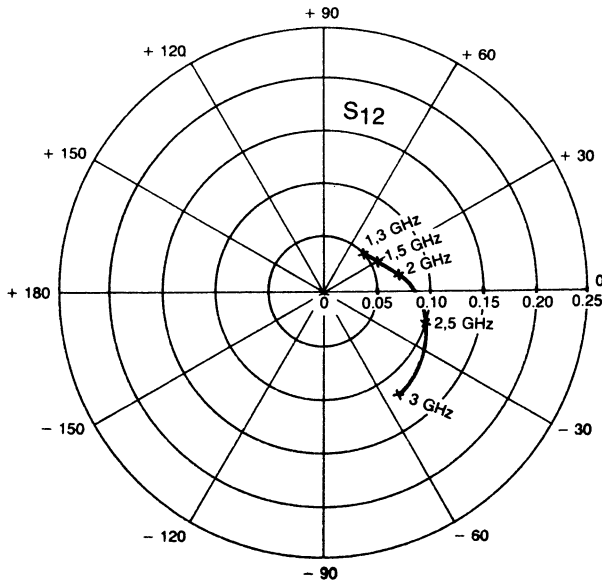
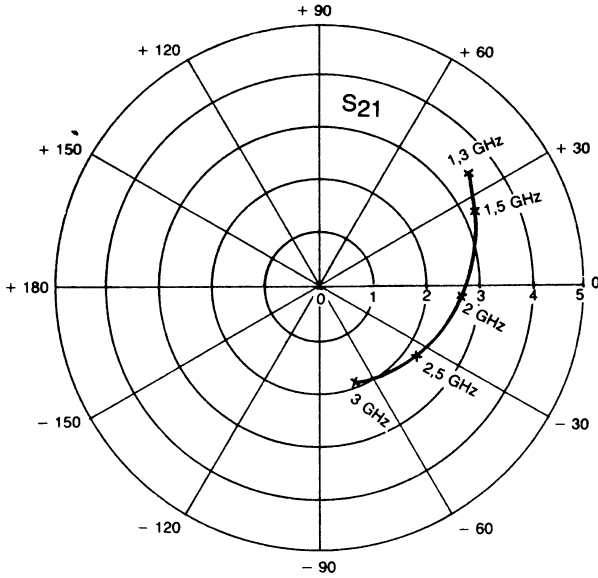


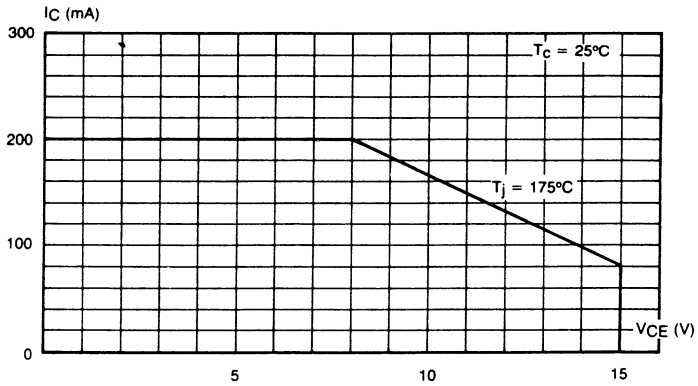
Dimensions  
in millimeters

CB - 294  
(.250 2L FL)









Safe area (class A) in static operating without HF power.