



TO-92 Plastic-Encapsulate Transistors

MPS2907A TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.625 \text{ W (} T_{amb}=25 \text{)}$$

Collector current

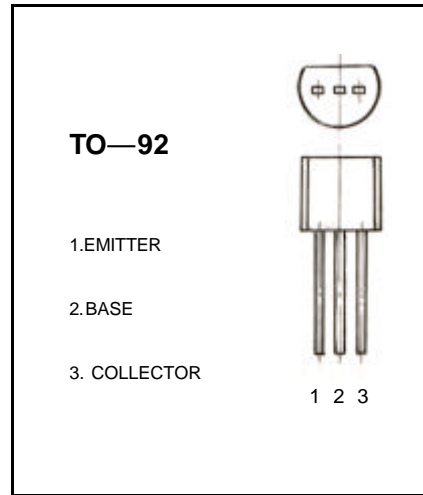
$$I_{CM} : -0.6 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -60 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55 \text{ to } +150$$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25$ unless otherwise specified)

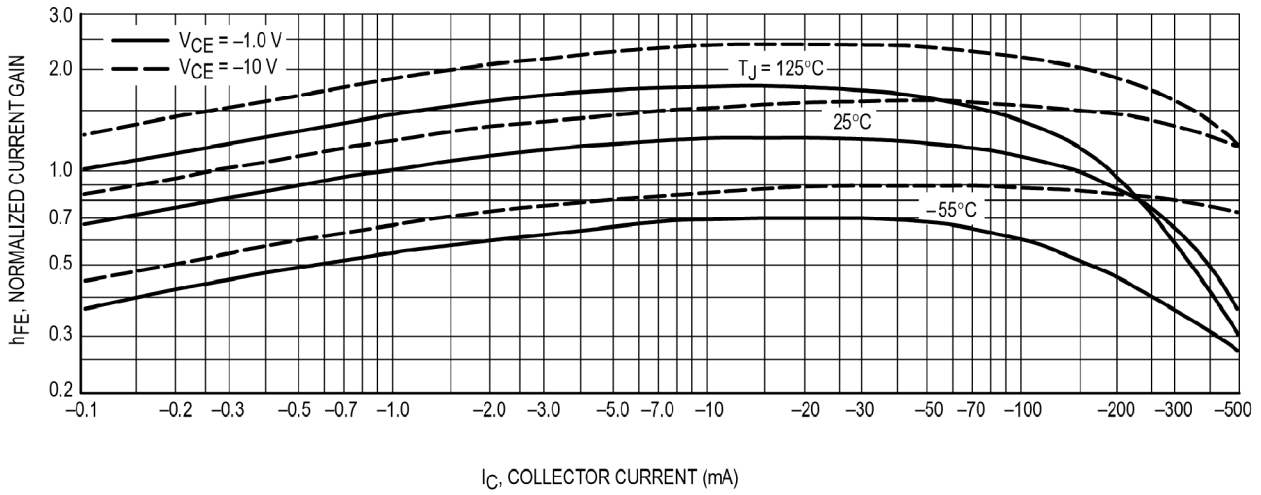
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10 \mu A, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10 mA, I_B = 0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10 \mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -50 V, I_E = 0$			-0.01	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -35 V, I_B = 0$			-0.05	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3 V, I_C = 0$			-0.01	μA
DC current gain	h_{FE}	$V_{CE} = -10 V, I_C = -150 mA$	100		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 mA, I_B = -50 mA$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 mA, I_B = -50 mA$			-1.2	V
Transition frequency	f_T	$V_{CE} = -20 V, I_C = -50 mA$ $f = 100 MHz$	200			MHz

CLASSIFICATION OF $h_{FE(1)}$

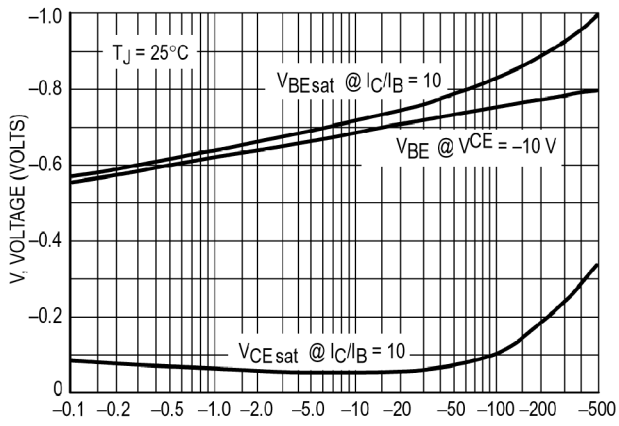
Rank	L	H
Range	100-200	200-300

Typical Characteristics

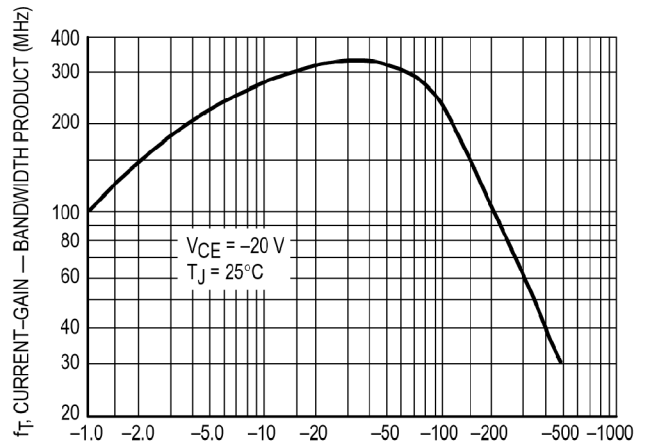
MPS2907A



DC Current Gain



“On” Voltage



Current-Gain — Bandwidth Product

TO-92 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.400	4.700	0.173	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270TYP		0.050TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Ö		1.600		0.063
↓	0.000	0.380	0.000	0.015