

TO-92 Plastic-Encapsulate Transistors**AV4403** TRANSISTOR (PNP)**FEATURES**

Power dissipation

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

Collector current

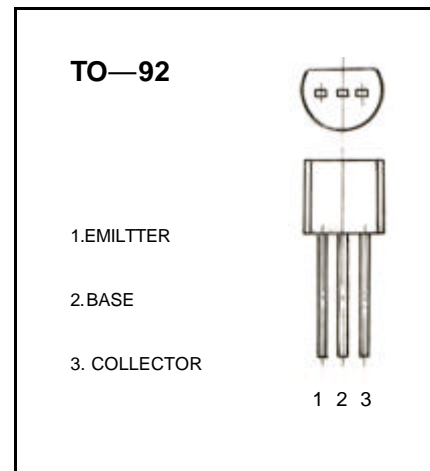
$$I_{CM} : -0.6 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -40 \text{ V}$$

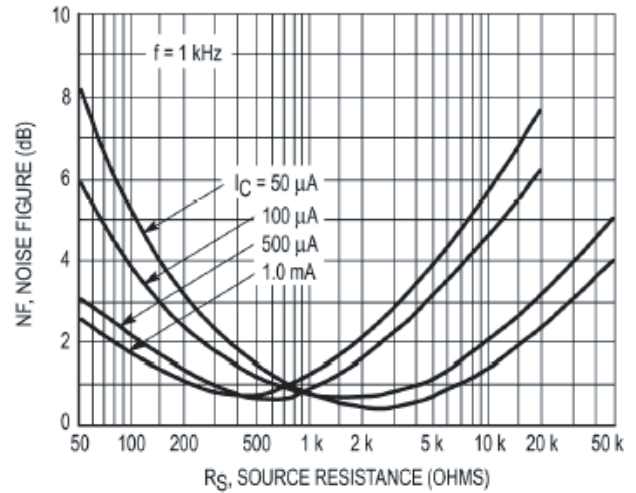
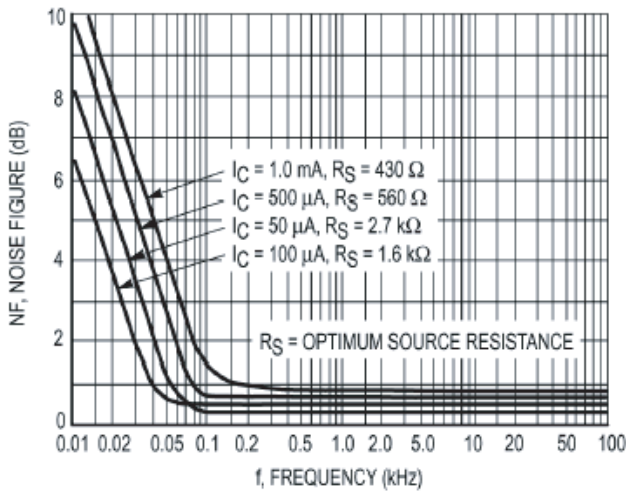
Operating and storage junction temperature range

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

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -35 V, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -35 V, I_B = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4V, I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -2 V, I_C = -150mA$	100	300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150 mA, I_B = -15mA$		-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -150 mA, I_B = -15mA$		-0.95	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -20mA$ $f = 100MHz$	200		MHz

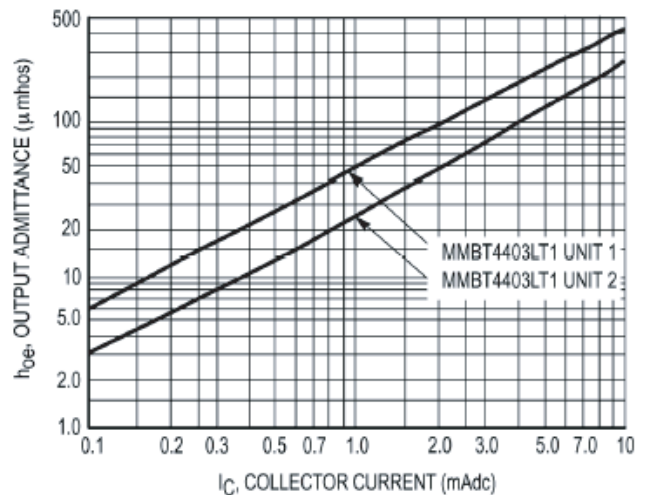
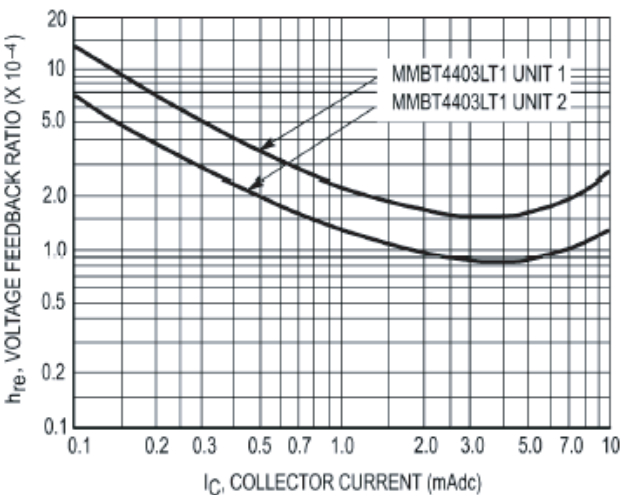
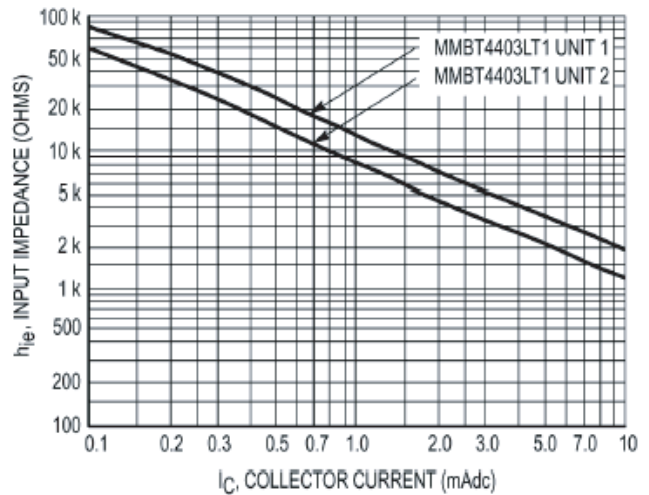
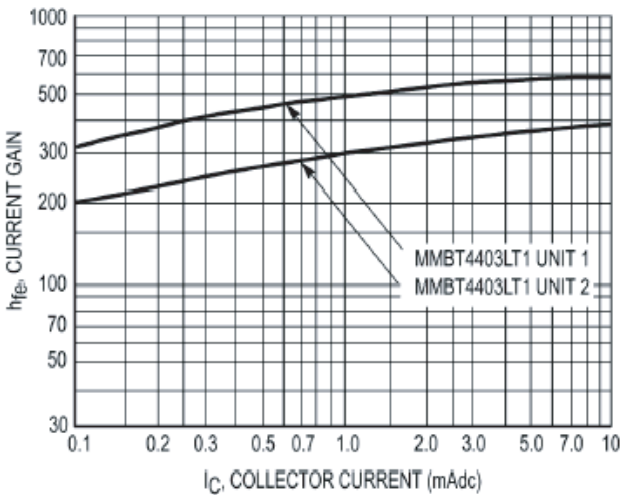
Typical Characteristics



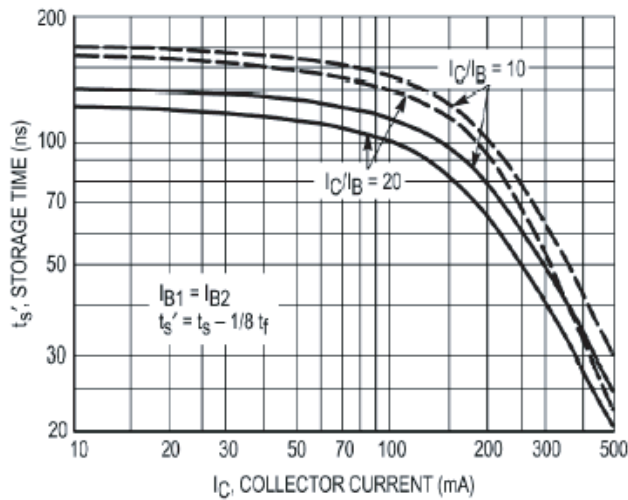
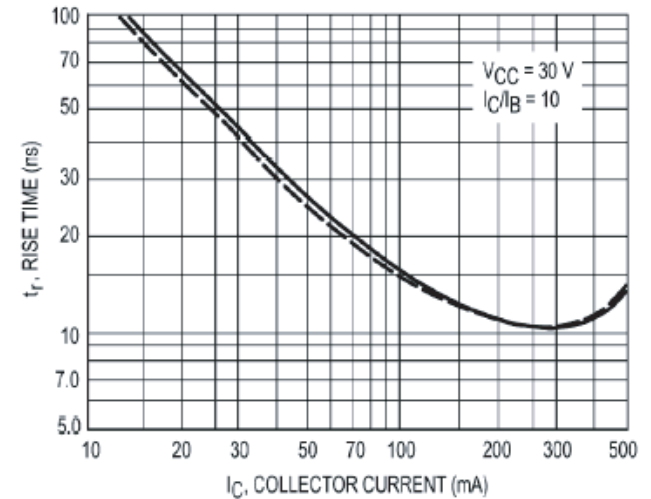
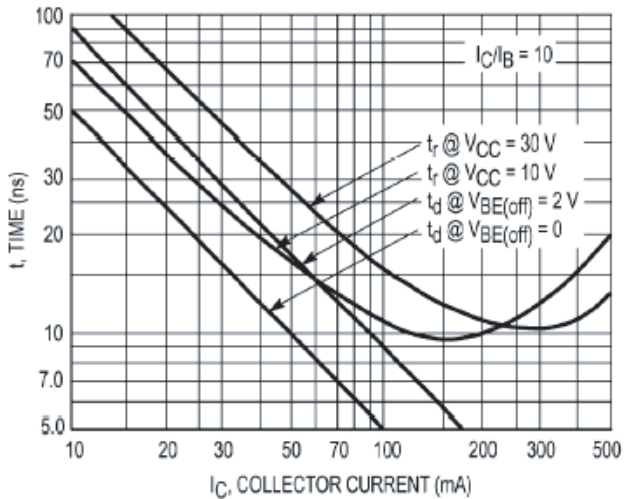
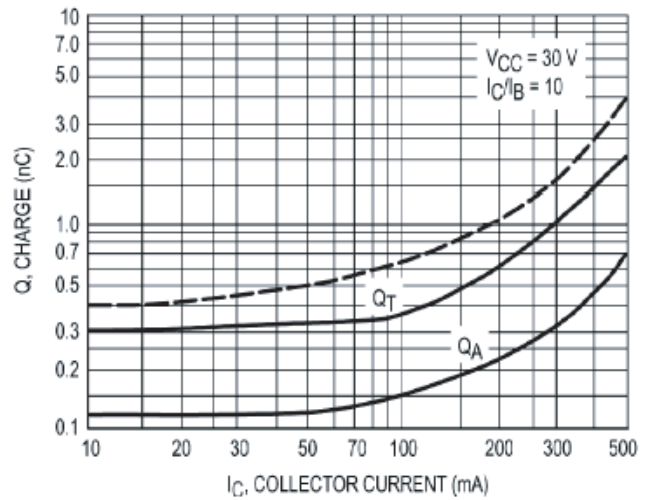
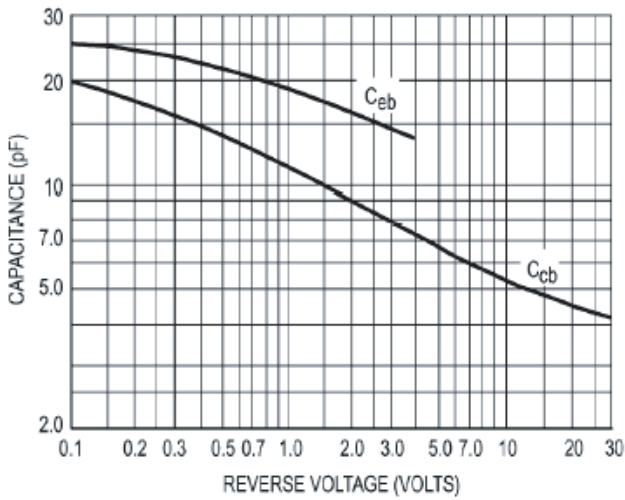
$V_{CE} = -10 \text{ Vdc}, f = 1.0 \text{ kHz}, T_A = 25^\circ\text{C}$

This group of graphs illustrates the relationship between h_{fe} and other "h" parameters for this series of transistors. To obtain these curves, a high-gain and a low-gain unit were

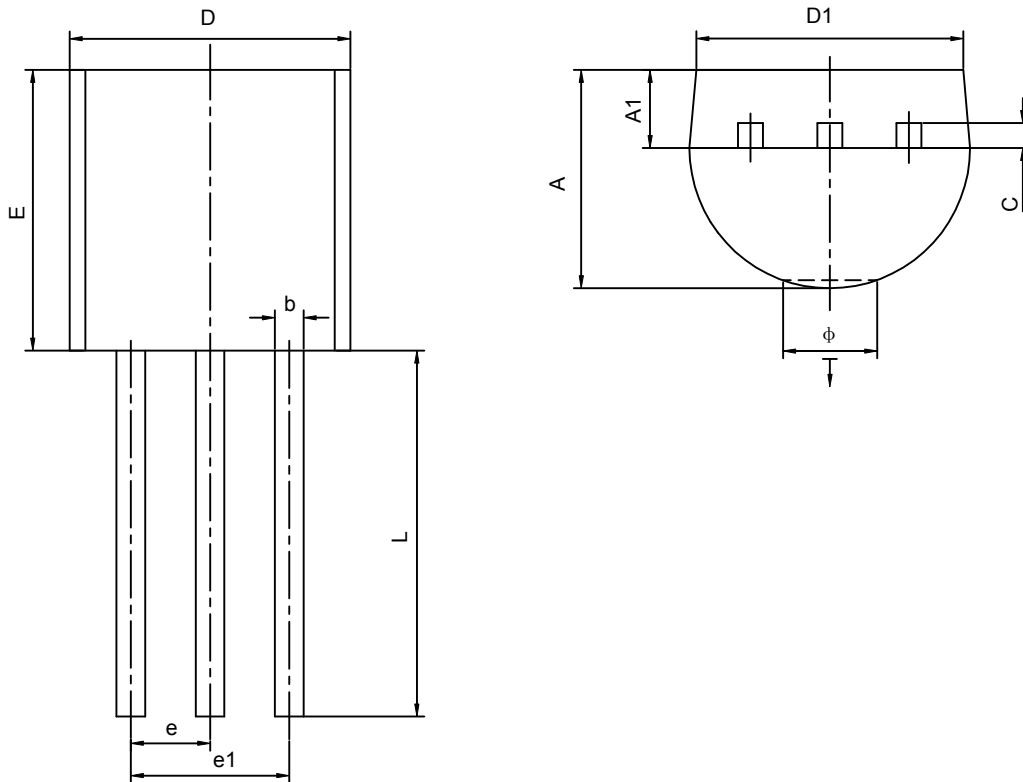
selected from the MMBT4403LT1 lines, and the same units were used to develop the correspondingly-numbered curves on each graph.



Typical Characteristics



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