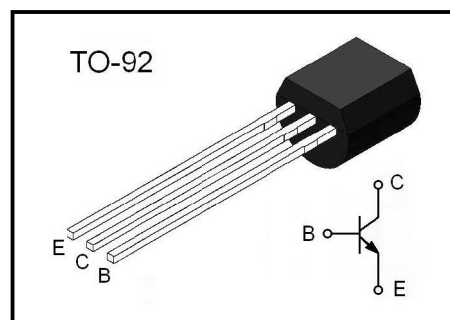


NPN Plastic-Encapsulate Transistors

High Voltage Transistor

This device is designed for application as a video output to drive color CRT and other high voltage applications

➤Complement to MPSA92



Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	300	V
Collector-Emitter Voltage	BV_{CEO}	300	V
Emitter-Base Voltage	BV_{EBO}	6	V
Collector Current	I_C	500	mA
Collector Power Dissipation	P_D	625	mW
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55~+150	℃

Electrical Characteristics (Ta=25℃)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	$I_C=100\mu A, I_E=0$	300			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C=1mA, I_B=0$	300			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=200V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=10V, I_B=1mA$	25			
		$V_{CE}=10V, I_B=10mA$	40			
		$V_{CE}=10V, I_B=30mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=20mA, I_B=2mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=20mA, I_B=2mA$			0.9	V
Transition frequency	f_T	$V_{CE}=20V, I_B=10mA$	40			MHz

Typical Characteristics

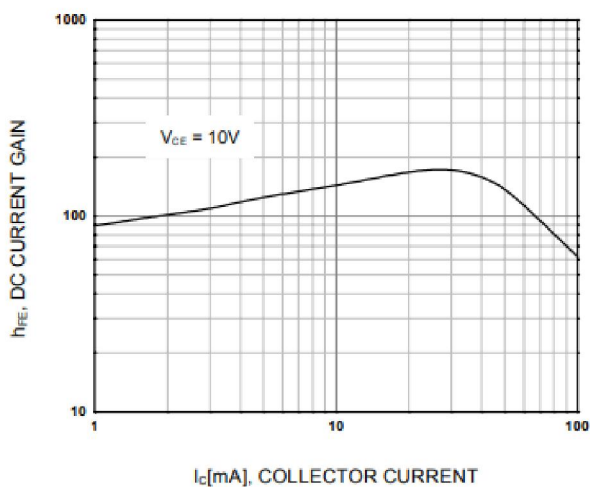


Figure 1. DC current Gain

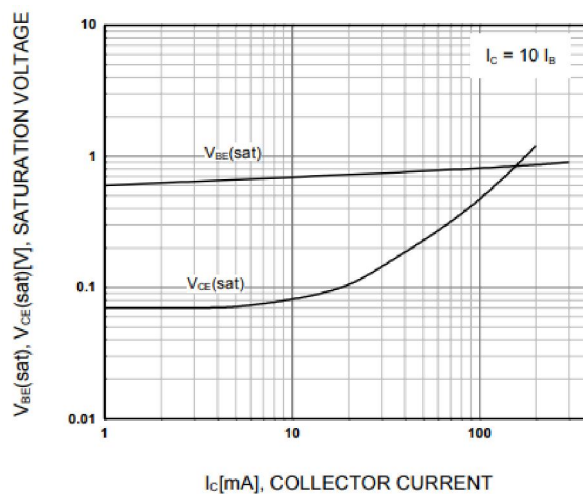


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

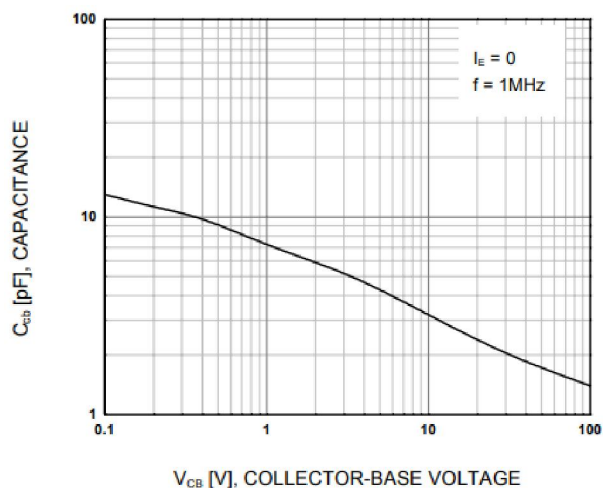


Figure 3. Collector-Base Capacitance

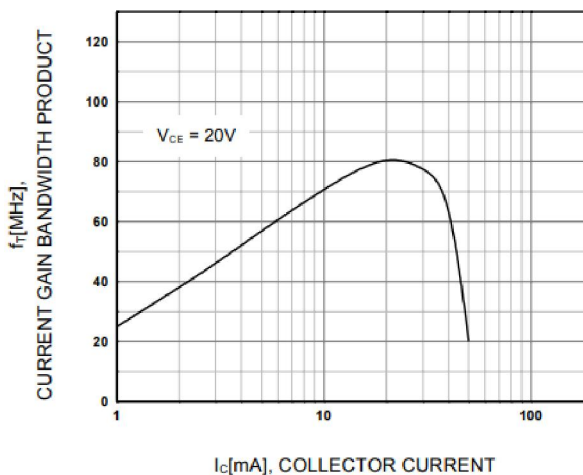


Figure 4. Current Gain Bandwidth Product

Ordering information

Package	Packing Description	Base Quantity
TO-92	Bulk	1000pcs/Bag
	Tape	2000pcs/Box

Package Dimensions

TO-92

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.70	0.130	0.146
A1	2.30	2.70	0.091	0.106
b	0.40	0.50	0.016	0.020
b1	0.50	0.70	0.020	0.028
c	0.35	0.45	0.014	0.018
D	4.45	4.70	0.175	0.185
E	4.40	4.65	0.173	0.183
e	1.17	1.37	0.046	0.054
e1	2.34	2.64	0.092	0.104
L	13.50	14.50	0.531	0.571
L1	1.80	2.20	0.071	0.087

Disclaimer

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