

# NPN Transistor

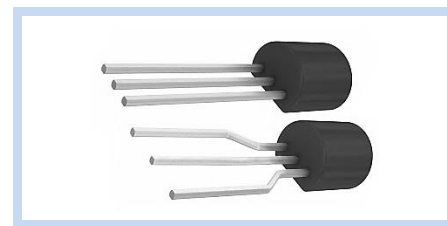
## 80V 625mW TO-92

MPSA06

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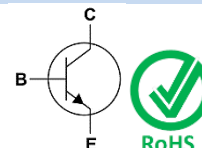
### FEATURE

- Collector-emitter Voltage  $V_{CE}=80V$
- Collector current: 500mA
- Application: Signal Processing, Switching, Amplification



### MECHANICAL DATA

- Case: TO-92, molded plastic
- Terminals: Solderable per MIL-STD-750, Method 2026



### MAXIMUM RATINGS

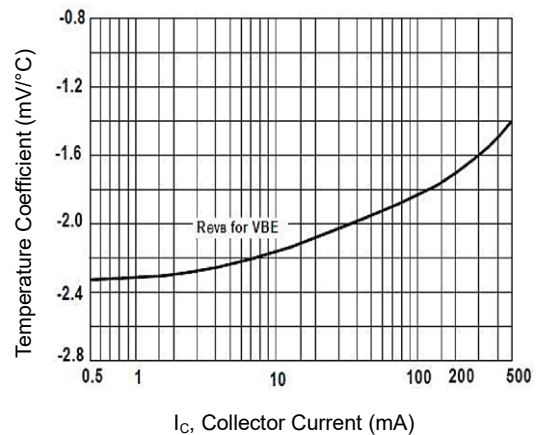
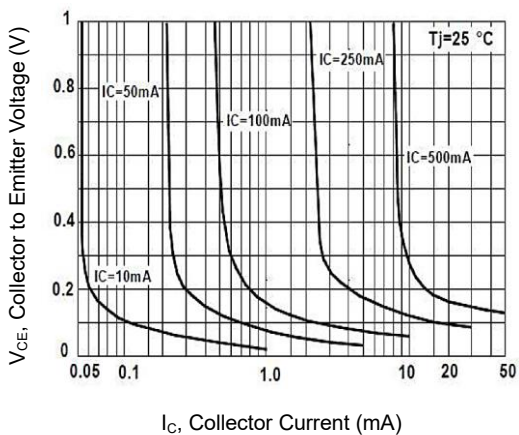
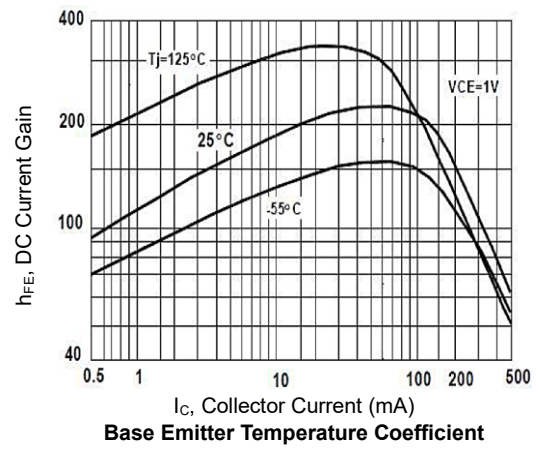
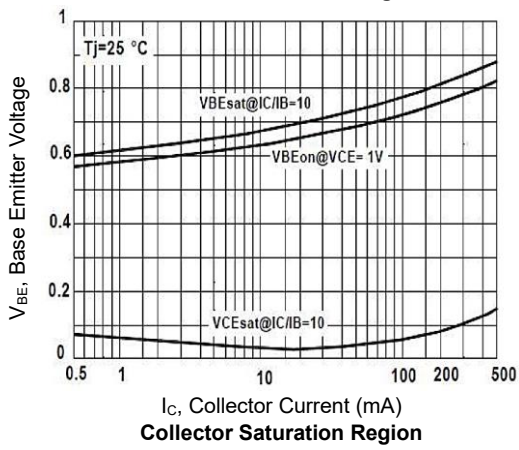
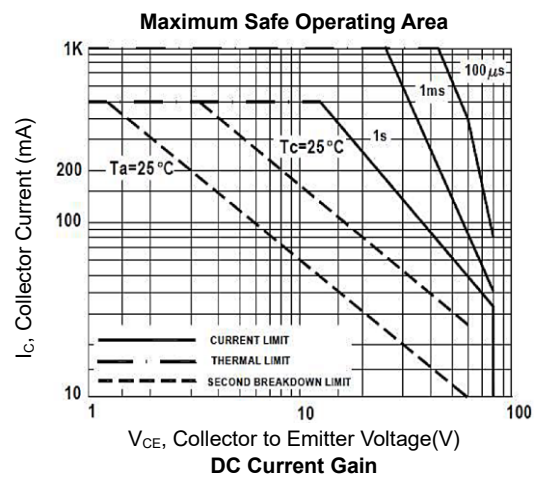
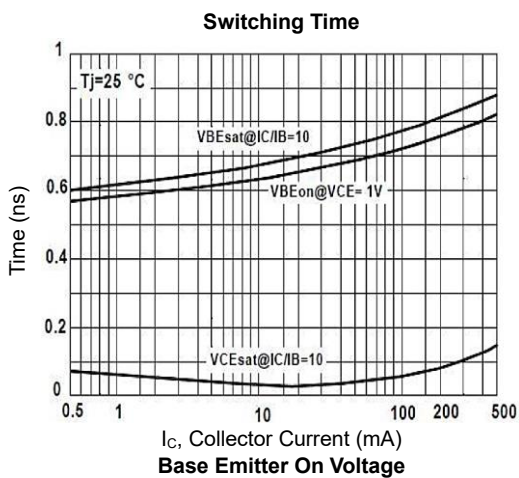
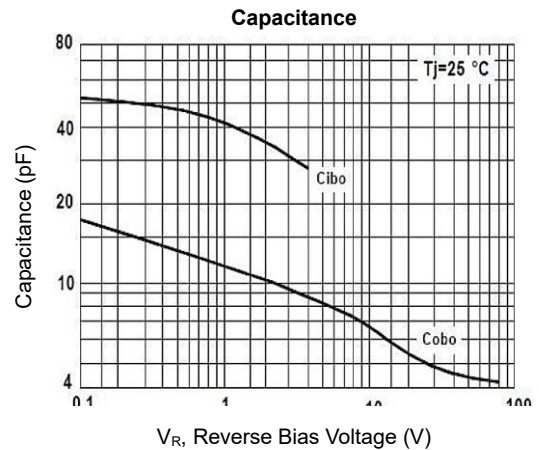
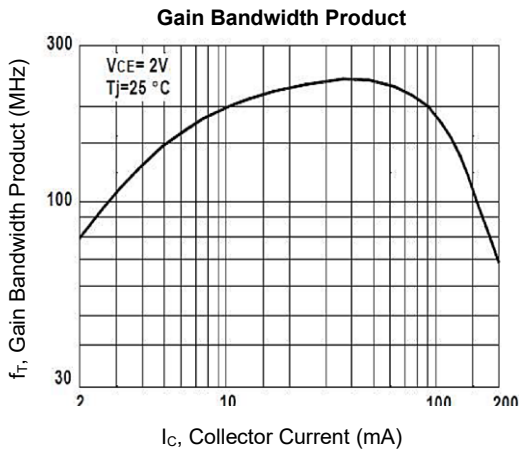
Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	80	V
Collector-Emitter Voltage	$V_{CEO}$	80	V
Emitter-Base Voltage	$V_{EBO}$	4.0	V
Collector Continuous Current	$I_C$	500	mA
Power Dissipation	$P_D$	625	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 ~ +150	°C

### ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Symbol	Min.	Max.	Unit
DC Current Gain	$V_{CE}=1V, I_C=10mA$	$h_{FE}$	100	-	-
	$V_{CE}=1V, I_C=100mA$		100	-	
Collector Base Cutoff Current	$V_{CB}=80V$	$I_{CBO}$	-	100	nA
Collector Emitter Cutoff Current	$V_{CE}=60V$	$I_{CES}$	-	100	nA
Collector Base Breakdown Voltage	$I_C=1mA$	$V_{(BR)CBO}$	80	-	V
Emitter Base Breakdown Voltage	$I_E=100\mu A$	$V_{(BR)EBO}$	4.0	-	V
Collector Emitter Saturation Voltage	$I_C=-100mA, I_B=-10mA$	$V_{CE(sat)}$	-	0.25	V
Base Emitter Saturation Voltage	$V_{CE}=1V, I_C=100mA$	$V_{BE(on)}$	-	1.20	V
Transition Frequency at 100MHz	$V_{CE}=2V, I_C=10mA$	$f_T$	100	-	MHz

Note:  $T_A=25^\circ C$ , unless otherwise noted.

**CHARACTERISTIC CURVES**



# NPN Transistor 80V 625mW TO-92

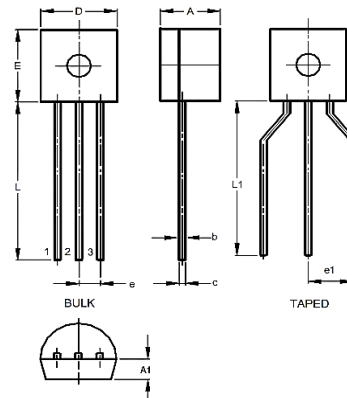
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## DIMENSIONS

Unit: mm

TO-92	Min	Max
A	3.50	3.70
A1	1.00	1.20
b	0.35	0.45
c	0.29	0.39
D	4.50	4.70
e	1.17	1.37
e1	2.44	2.94
E	4.50	4.70
L	12.5	--
L1	12.0	--



## PACKING OPTIONS

Part NO	Package	Packing Code	Type	Packing
MPSA06	TO-92	TA	Bent Lead	Tape & Reel Ammo
		B	Straight Lead	Bulk