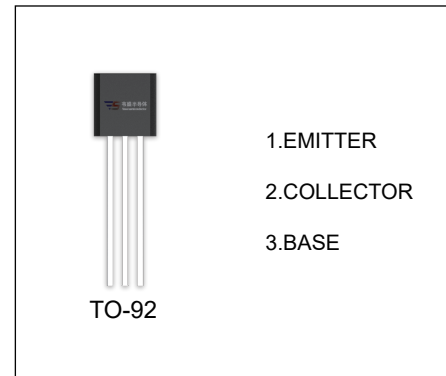


## MPS750 TRANSISTOR (PNP)

### FEATURES

- General Purpose Amplifier



### ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
MPS750	TO-92	Bulk	1000pcs/Bag
MPS750-TA	TO-92	Tape	2000pcs/Box

### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	-60	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-40	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-2	A
P <sub>C</sub>	Collector Power Dissipation	625	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	200	°C/W
T <sub>J</sub> , T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55~+150	°C

$T_a=25\text{ }^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.1\text{mA}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C = -10\text{mA}, I_B = 0$	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.01\text{mA}, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -60\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}^*$	$V_{CE} = -2\text{V}, I_C = -50\text{mA}$	75			
	$h_{FE(2)}^*$	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	75		400	
	$h_{FE(3)}^*$	$V_{CE} = -2\text{V}, I_C = -1\text{A}$	75			
	$h_{FE(4)}^*$	$V_{CE} = -2\text{V}, I_C = -2\text{A}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)(1)}^*$	$I_C = -2\text{A}, I_B = -200\text{mA}$			-0.5	V
	$V_{CE(sat)(2)}^*$	$I_C = -1\text{A}, I_B = -100\text{mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C = -1\text{A}, I_B = -100\text{mA}$			-1.2	V
Base-emitter voltage	$V_{BE}^*$	$I_C = -1\text{A}, V_{CE} = -2\text{V}$			-1.0	V
Transition frequency	$f_T$	$V_{CE} = -5\text{V}, I_C = -50\text{mA}, f = 100\text{MHz}$	75			MHz

\*Pulse test: pulse width  $\leq 300\mu\text{s}$ , duty cycle  $\leq 2.0\%$ .