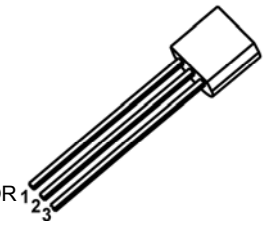
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

TO – 92



MPS3702 TRANSISTOR (PNP)

FEATURES

- General Purpose Amplifier Transistor

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.8	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -0.1mA,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-0.1mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-3V,I_C=0			-0.1	μA
DC current gain	h_{FE}*	V_{CE}=-5V, I_C=-50mA	60		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=-50mA,I_B=-5mA			-0.25	V
Base-emitter voltage	V_{BE}*	I_C=-50mA, V_{CE}=-5V	-0.6		-1.0	V
Current gain-bandwidth product	f_T	V_{CE}=-5V,I_C=-50mA,f=20MHz	100			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz			12	pF

*Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%.