MPSA93 TRANSISTOR (PNP)

TO-92

1.EMITTER
2.COLLECTOR
3.BASE

FEATURES

- General Purpose Amplifier

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
MPSA93	TO-92	Bulk	1000pcs/Bag
MPSA93-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-200	V
V_{CEO}	Collector-Emitter Voltage	-200	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.5	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

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	-200			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$*	I_C=-1mA,I_B=0	-200			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}=-160V,I_E=0			-0.25	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-3V,I_C=0			-0.1	mA
DC current gain	$h_{FE(1)}$*	V_{CE}=-10V, I_C=-1mA	25			
	$h_{FE(2)}$*	V_{CE}=-10V, I_C=-10mA	40			
	$h_{FE(3)}$*	V_{CE}=-10V, I_C=-30mA	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=-20mA,I_B=-2mA			-0.4	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_C=-10mA,f=100MHz	50			MHz

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

Typical Characteristics MPSA93