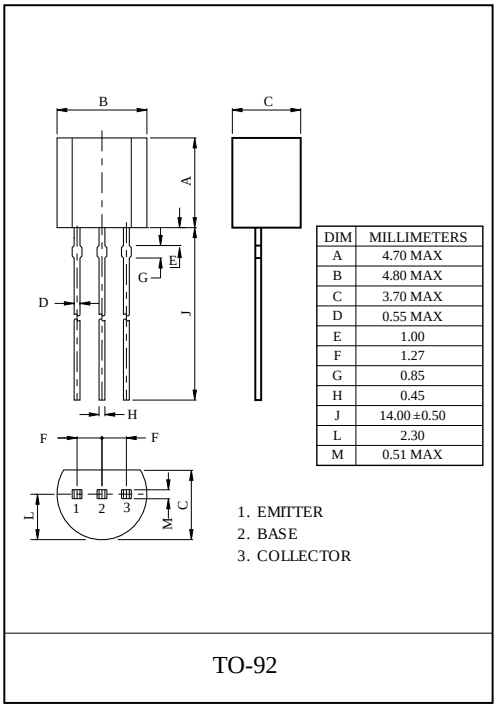
MPSA14 TRANSISTOR (NPN)



DIM	MILLIMETERS
A	4.70 MAX
B	4.80 MAX
C	3.70 MAX
D	0.55 MAX
E	1.00
F	1.27
G	0.85
H	0.45
J	14.00 ±0.50
L	2.30
M	0.51 MAX

TO-92

FEATURES

- Darlington Transistors

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	10	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	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	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.1mA,I_C=0	10			V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=10V,I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$*	V_{CE}=5V, I_C=10mA	10000			
	$h_{FE(2)}$*	V_{CE}=5V, I_C =100mA	10000			
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=100mA,I_B=0.1mA			1.5	V
Base-emitter voltage	V_{BE}*	V_{CE}=5V,I_C=100mA			2.0	V
Current gain-bandwidth product	f_T	V_{CE}=5V,I_C=10mA,f=100MHz	125			MHz

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

Typical Characteristics