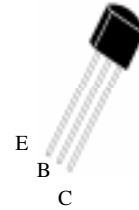




DEVICE SPECIFICATION

TYPE : MPSA 92
POLARITY : PNP
APPLICATION : High Voltage Amplifier
PACKAGE : TO - 92



ABSOLUTE MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Power Dissipation @ $T_A = 25^\circ C$	P_D	625	mW
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-55 to 150	$^\circ C$

THERMAL CHARACTERISTICS

Thermal Resistance, Junction to Case $R_{\theta J-C} = 83.3^\circ C/W(max)$
Thermal Resistance, Junction to Ambient $R_{\theta J-A} = 200^\circ C/W(max)$

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^\circ C$, Unless otherwise specified)

CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
<u>OFF CHARACTERISTICS</u>				
Collector-Emitter Breakdown Voltage ($I_C=1.0mA, I_B=0$)	$B_{V_{CEO}}$	300	-	Vdc
Collector -Base Breakdown Voltage ($I_C=100\mu A, I_E=0$)	$B_{V_{CBO}}$	300	-	Vdc
Emitter-Base Breakdown Voltage ($I_E=100\mu A, I_C=0$)	$B_{V_{EBO}}$	5.0	-	Vdc
Collector Cut-off Current ($V_{CB}=200 Vdc, I_E=0$)	I_{CBO}	-	250	nA
Emitter Cut-off Current ($V_{EB}=3.0V dc, I_C=0$)	I_{EBO}	-	100	nA dc
<u>ON CHARACTERISTICS*</u>				
DC Current Gain ($I_C=1 mA, V_{CE}=10 Vdc$)	h_{FE}	25	-	-
($I_C=10 mA, V_{CE}=10 Vdc$)		40	-	-
($I_C=30 mA, V_{CE}=10 Vdc$)		25	-	-
Collector-Emitter Saturation Voltage ($I_C=20 mA, I_B=2.0mA$)	$V_{CE(Sat)}$	-	0.5	Vdc
Base-Emitter Saturation Voltage ($I_C=20 mA, I_B=2 mA$)	$V_{BE(Sat)}$	-	0.9	Vdc



CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
<u>SMALL SIGNAL CHARACTERISTICS</u>				
Current Gain Bandwidth Product ($I_C=10$ mA dc, $V_{CE}=20$ V dc, $f=100$ MHz)	f_T	50	-	MHz
Collector - Base Capacitance ($V_{CB}=20$ V dc, $I_E=0$, $f=1$ MHz)	C_{cb}	-	6	pF

* Pulse test : Pulse width ≤ 300 μ s, Duty cycle $\leq 2.0\%$.