

MPSA06**NPN EPITAXIAL SILICON TRANSISTOR**

T-29-21

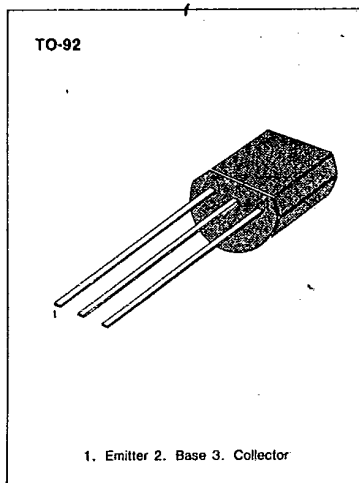
AMPLIFIER TRANSISTOR

- Collector-Emitter Voltage: $V_{CE0}=80V$
- Collector Dissipation: $P_c(\text{max})=625mW$

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ C$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	80	V
Collector-Emitter Voltage	V_{CE0}	80	V
Emitter-Base Voltage	V_{EB0}	4	V
Collector Current	I_c	500	mA
Collector Dissipation	P_c	625	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{stg}	-55 ~ 150	$^\circ C$

* Refer to MPSA05 for graphs



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ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-emitter Breakdown Voltage	BV_{CE0}	$I_c=1mA, I_B=0$	80			V
Emitter-Base Breakdown Voltage	BV_{EB0}	$I_E=100\mu A, I_C=0$	4			V
Collector Cut-off Current	I_{CE0}	$V_{CE}=60V, I_B=0$			100	nA
Collector Cut-off Current	I_{CB0}	$V_{CB}=80V, I_E=0$			100	nA
DC Current Gain	h_{FE}	$I_c=10mA, V_{CE}=1V$	50			
		$I_c=100mA, V_{CE}=1V$	50			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c=100mA, I_B=10mA$			0.25	V
Current Gain Bandwidth Product	f_T	$I_c=10mA, V_{CE}=2V$ $f=100MHz$	100			MHz
Base-Emitter On Voltage	$V_{BE(on)}$	$I_c=100mA, V_{CE}=1V$			1.2	V

* Pulse Test: Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$