

MPSA06**NPN EPITAXIAL SILICON TRANSISTOR**

T-29-21

AMPLIFIER TRANSISTOR

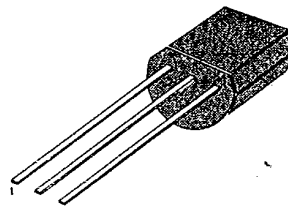
- Collector-Emitter Voltage: $V_{CE0} = 80V$
- Collector Dissipation: $P_C (max) = 625mW$

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	80	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	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

TO-92



1. Emitter 2. Base 3. Collector

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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-emitter Breakdown Voltage	BV_{CEO}	$I_C = 1mA, I_B = 0$	80			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = 100\mu A, I_C = 0$	4			V
Collector Cut-off Current	I_{CEO}	$V_{CE} = 60V, I_B = 0$			100	nA
Collector Cut-off Current	I_{CBO}	$V_{CB} = 80V, I_E = 0$			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 $\leq 2\%$ 