

2N6517

NPN EPITAXIAL SILICON TRANSISTOR

T-29-21

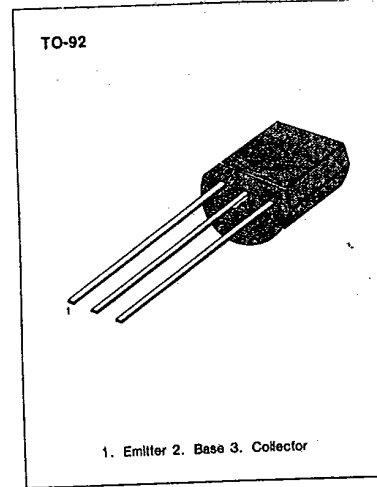
HIGH VOLTAGE TRANSISOTR

- Collector-Emitter Voltage:  $V_{CE0}=350V$
- Collector Dissipation:  $P_c(\text{max})=625mW$

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	350	V
Collector-Emitter Voltage	$V_{CEO}$	350	V
Emitter-Base Voltage	$V_{EBO}$	6	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 2N6515 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	$BV_{CEO}$	$I_c = 1mA, I_B = 0$	350			V
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_c = 100\mu A, I_E = 0$	350			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E = 10\mu A, I_C = 0$	6			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = 250V, I_E = 0$			50	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$			50	nA
* DC Current Gain	$h_{FE}$	$I_c = 1mA, V_{CE} = 10V$	20			
		$I_c = 10mA, V_{CE} = 10V$	30			
		$I_c = 30mA, V_{CE} = 10V$	30		200	
		$I_c = 50mA, V_{CE} = 10V$	20		200	
		$I_c = 100mA, V_{CE} = 10V$	15			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c = 10mA, I_B = 1mA$			0.3	V
		$I_c = 20mA, I_B = 2mA$			0.35	V
		$I_c = 30mA, I_B = 3mA$			0.5	V
		$I_c = 50mA, I_B = 5mA$			1	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_c = 10mA, I_B = 1mA$			0.75	V
		$I_c = 20mA, I_B = 2mA$			0.85	V
		$I_c = 30mA, I_B = 3mA$			0.9	V
Collect-Base Capacitance	$C_{cb}$	$V_{CB} = 20V, I_E = 0$			6	pF
* Current Gain Bandwidth Product	$f_T$	$f = 1MHz$	40		200	MHz
		$I_c = 10mA, V_{CE} = 20V$				
		$f = 20MHz$				
Base Emitter On Voltage	$V_{BE(on)}$	$I_c = 100mA, V_{CE} = 10V$			2	V

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

