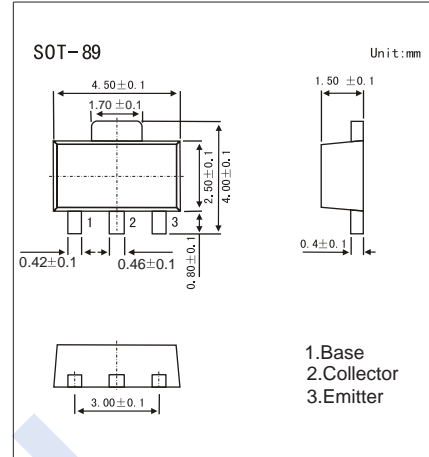


NPN Transistors

2KD3006

■ Features

- High collector to emitter voltage: $V_{CE0} > 120V$.

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	120	V
Collector-emitter voltage	V_{CE0}	120	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	0.7	A
Collector current (pulse) *	I_C (pu)	1.2	A
Collector power dissipation	P_C	2	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

*. $PW \leq 10ms$, duty cycle $\leq 50\%$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 100 \mu A$, $I_E = 0$	120			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = 1 mA$, $I_B = 0$	120			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu A$, $I_C = 0$	5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = 120 V$, $I_E = 0$			0.1	uA
Emitter cut-off current	I_{EB0}	$V_{EB} = 5 V$, $I_C = 0$			0.1	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = 500 mA$, $I_B = 50 mA$			0.6	V
Base - emitter saturation voltage *	$V_{BE(sat)}$	$I_C = 500 mA$, $I_B = 50 mA$			1.5	
Base - emitter voltage *	V_{BE}	$V_{CE} = 10 V$, $I_C = 10 mA$	0.55		0.68	
DC current gain *	h_{FE}	$V_{CE} = 1 V$, $I_C = 5 mA$	45	200		
		$V_{CE} = 1 V$, $I_C = 100 mA$	135		270	
Collector output capacitance	C_{ob}	$V_{CB} = 10 V$, $I_E = 0$, $f = 1 MHz$		10		pF
Transition frequency	f_T	$V_{CE} = 10 V$, $I_C = 10 mA$		90		MHz

*. $PW \leq 350 \mu s$, duty cycle $\leq 2\%$

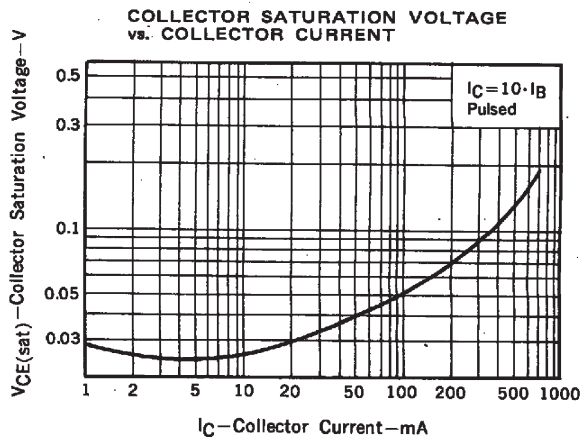
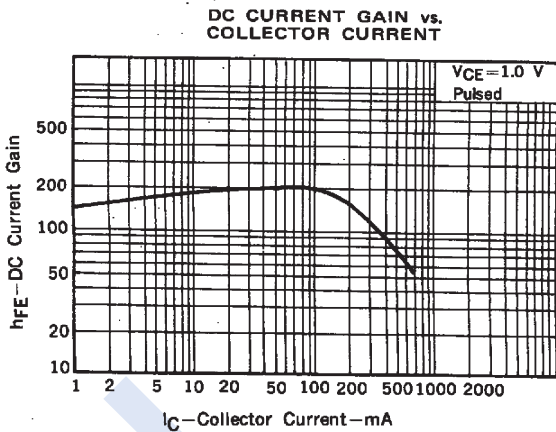
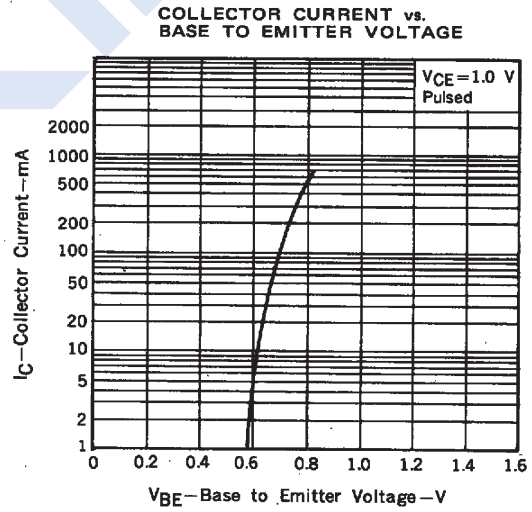
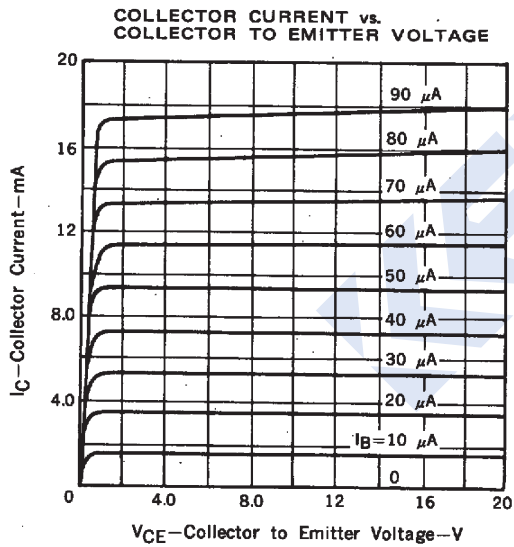
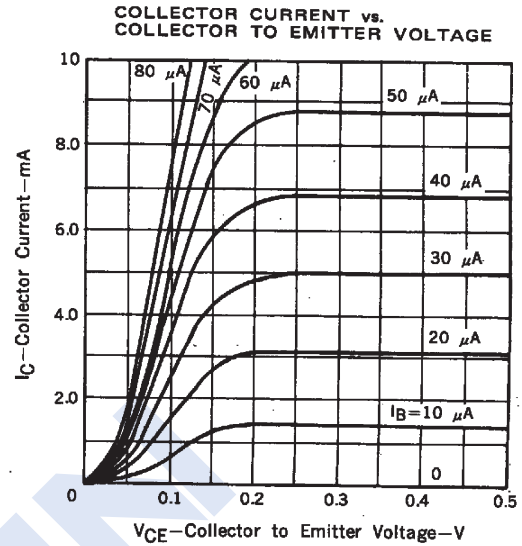
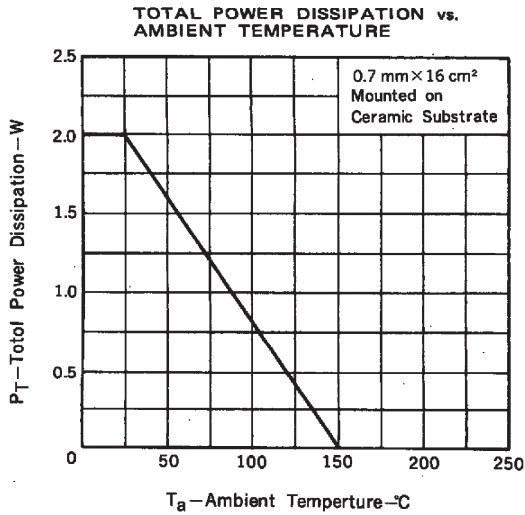
■ Marking

Marking	KO2*
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NPN Transistors

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Typical Characteristics



NPN Transistors

2KD3006

■ Typical Characteristics

