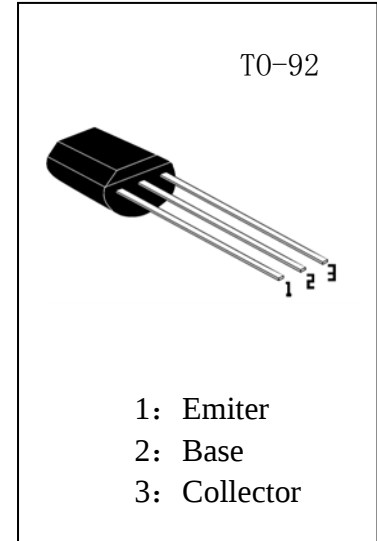


GENERAL PURPOSE TRANSISTOR

- * Complement to 2N2907A
- * Collector-Emitter Voltage $V_{CE0}=40V$
- * Collector Dissipation $P_c(\max)=625\text{ mW}$
- * High Collector Current $I_c(\max)=600\text{mA}$

ABSOLUTE MAXIMUM RATINGS at $T_{amb}=25^{\circ}\text{C}$

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{cbo}	75	V
Collector-Emitter Voltage	V_{ceo}	40	V
Emitter-Base Voltage	V_{ebo}	6	V
Collector Current	I_c	600	mA
Collector Dissipation	P_c	625	m W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55~150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS at $T_{amb}=25^{\circ}\text{C}$

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{cbo}	75			V	$I_c=10\mu\text{A}$ $I_e=0$
Collector-Emitter Breakdown Voltage#	BV_{ceo}	40			V	$I_c=10\text{mA}$ $I_b=0$
Emitter-Base Breakdown Voltage	BV_{ebo}	6			V	$I_e=10\mu\text{A}$ $I_c=0$
Collector Cutoff Current	I_{cbo}			50	nA	$V_{cb}=60\text{V}$ $I_e=0$
Emitter Cutoff Current	I_{ebo}			50	nA	$V_{eb}=3\text{V}$ $I_c=0$
DC Current Gain	Hfe_1	35				$V_{ce}=10\text{V}$ $I_c=0.1\text{mA}$
DC Current Gain	Hfe_2	50				$V_{ce}=10\text{V}$ $I_c=1\text{mA}$
DC Current Gain	Hfe_3	75				$V_{ce}=10\text{V}$ $I_c=10\text{mA}$
DC Current Gain#	Hfe_4	100		300		$V_{ce}=10\text{V}$ $I_c=150\text{mA}$
DC Current Gain#	Hfe_5	40				$V_{ce}=10\text{V}$ $I_c=500\text{mA}$
Collector-Emitter Saturation Voltage#	$V_{ce(sat)}$			0.3	V	$I_c=150\text{mA}$ $I_b=15\text{mA}$
Collector-Emitter Saturation Voltage#	$V_{ce(sat)}$			1	V	$I_c=500\text{mA}$ $I_b=50\text{mA}$
Base-Emitter Saturation Voltage#	$V_{be(sat)}$		0.60	1.2	V	$I_c=150\text{mA}$ $I_b=15\text{mA}$
Base-Emitter Saturation Voltage#	$V_{be(sat)}$			2.6	V	$I_c=500\text{mA}$ $I_b=50\text{mA}$
Output Capacitance	C_{ob}			8	pF	$V_{cb}=10\text{V}$ $I_e=0$ $f=1\text{MHz}$
Current Gain-Bandwidth Product	fT	300			MHz	$V_{ce}=20\text{V}$ $I_c=20\text{mA}$ $f=100\text{MHz}$

Pulse Test : Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$