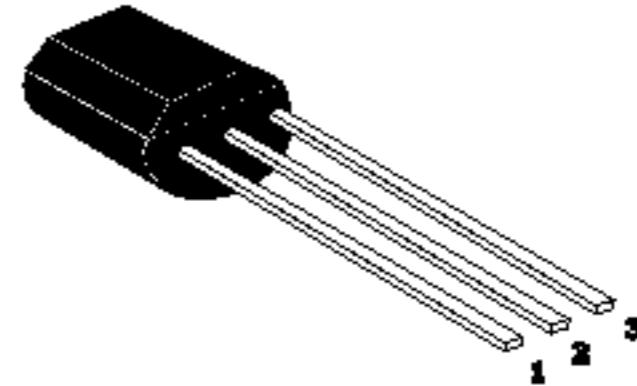




**HIGH VOLTAGE TRANSISTOR**

- Complement to MPSA42
- High Collector-Emitter Voltage  $V_{ce0} = -300V$
- Collector Dissipation  $P_c = 625mW$  ( $T_a = 25^{\circ}C$ )

Package: TO-92



PIN:	1	2	3
STYLE	E	B	C
NO.1	E	B	C

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{cbo}$	-300	V
Collector-Emitter Voltage	$V_{ceo}$	-300	V
Emitter-Base Voltage	$V_{ebo}$	-5	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	$^{\circ}C$

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	$BV_{cbo}$	-300			V	$I_c = -100\mu A$ $I_e = 0$
Collector-Emitter Breakdown Voltage	$BV_{ceo}$	-300			V	$I_c = -1mA$ $I_b = 0$
Emitter-Base Breakdown Voltage	$BV_{ebo}$	-5			V	$I_e = -100\mu A$ $I_c = 0$
Collector Cutoff Current	$I_{cbo}$			-250	nA	$V_{cb} = -200V$ $I_e = 0$
Emitter Cutoff Current	$I_{ebo}$			-100	nA	$V_{eb} = -3V$ $I_c = 0$
DC Current Gain	$Hfe_1$	25				$V_{ce} = -10V$ $I_c = -1mA$
DC Current Gain	$Hfe_2$	80		250		$V_{ce} = -10V$ $I_c = -10mA$
DC Current Gain	$Hfe_3$	25				$V_{ce} = -10V$ $I_c = -30mA$
Collector-Emitter Saturation Voltage	$V_{ce(sat)}$			-0.5	V	$I_c = -20mA$ $I_b = -2mA$
Base-Emitter Saturation Voltage	$V_{be(sat)}$			-0.9	V	$I_c = -20mA$ $I_b = -2mA$
Collector-Base Capacitance	$C_{cb}$			6	pF	$V_{cb} = -20V$ $I_e = 0$ $f = 1MHz$
Current Gain-Bandwidth Product	$fT$	50			MHz	$V_{ce} = -20V$ $I_c = -10mA$ $f = 100MHz$

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