



**AM /FM IF AMPLIFIER,LOCAL OSCILLATOR
OF FM/VHF TUNER**

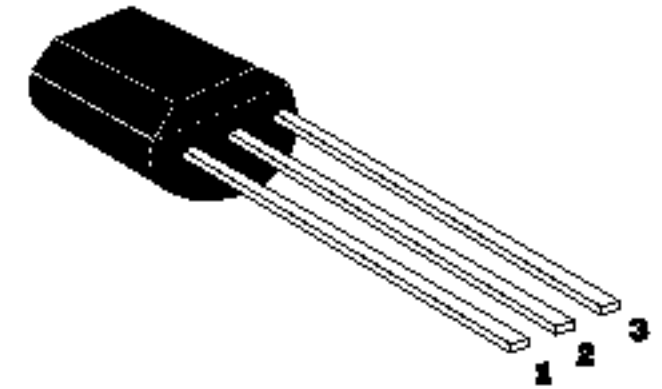
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- * High Current Gain Bandwidth Product $f_T=1100\text{MHz}$
- * High Total Power Dissipation : $P_c=400\text{mW}$

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{cbo}	30	V
Collector-Emitter Voltage	V_{ceo}	15	V
Emitter-Base Voltage	V_{ebo}	5	V
Collector Current	I_c	50	mA
Collector Dissipation	P_c	400	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~150	$^\circ\text{C}$

Package: TO-92



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

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{cbo}	30			V	$I_c=100\mu\text{A}$ $I_e=0$
Collector-Emitter Breakdown Voltage	BV_{ceo}	15			V	$I_c=1\text{mA}$ $I_b=0$
Emitter-Base Breakdown Voltage	BV_{ebo}	5			V	$I_e=100\mu\text{A}$ $I_c=0$
Collector Cutoff Current	I_{cbo}			50	nA	$V_{cb}=12\text{V}$ $I_e=0$
Emitter Cutoff Current	I_{ebo}			50	nA	$V_{eb}=3\text{V}$ $I_c=0$
DC Current Gain	H_{fe}	28	100	300		$V_{ce}=5\text{V}$ $I_c=1\text{mA}$
Collector-Emitter Saturation Voltage	$V_{ce(sat)}$			0.5	V	$I_c=10\text{mA}$ $I_b=1\text{mA}$
Output Capacitance	C_{ob}		1.3	1.7	pF	$V_{cb}=10\text{V}$ $I_e=0$ $f=1\text{MHz}$
Current Gain-Bandwidth Product	f_T	700	1100		MHz	$V_{ce}=5\text{V}$ $I_c=5\text{mA}$

CLASSIFICATION H_{FE}

Classification	D	E	F	G	H	I	J
H_{fe}	28-45	39-60	54-80	72-108	97-146	132-198	198-300