



APPLICATIONS

TV UHF Oscillator Applications.

TV VHF Mixer Applications.

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

T_{stg} —Storage Temperature..... $-55\sim 150^{\circ}\text{C}$

T_j —Junction Temperature..... 150°C

P_C —Collector Dissipation..... 250mW

V_{CBO} —Collector-Base Voltage..... 30V

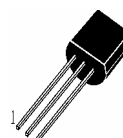
V_{CEO} —Collector-Emitter Voltage..... 15V

V_{EBO} —Emitter-Base Voltage..... 3V

I_C —Collector Current..... 50mA

I_E —Emitter Current..... 50mA

TO-92



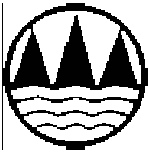
1—Emitter, E

2—Collector, C

3—Base, B

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BV_{CBO}	Collector-Base Breakdown Voltage	30			V	$I_C=100\mu\text{A}$, $I_E=0$
BV_{CEO}	Collector-Emitter Breakdown Voltage	15			V	$I_C=1\text{mA}$, $I_B=0$
H_{FE}	DC Current Gain	20				$V_{\text{CE}}=3\text{V}$, $I_C=8\text{mA}$
$V_{\text{CE(sat)}}$	Collector- Emitter Saturation Voltage			0.5	V	$I_C=10\text{mA}$, $I_B=1\text{mA}$
I_{CBO}	Collector Cut-off Current			0.1	μA	$V_{\text{CB}}=15\text{V}$, $I_E=0$
I_{EBO}	Emitter Cut-off Current			1.0	μA	$V_{\text{EB}}=3\text{V}$, $I_C=0$
f_{T}	Current Gain-Bandwidth Product	650			MHz	$V_{\text{CE}}=10\text{V}$, $I_C=8\text{mA}$
C_{ob}	Output Capacitance		1.2	1.5	pF	$V_{\text{CB}}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$
$C_{\text{c,rb}}'$	Collector-Base Time Constant			12	ps	$V_{\text{CB}}=10\text{V}$, $I_C=8\text{mA}$, $f=30\text{MHz}$



STATIC CHARACTERISTICS

