

TRANSISTOR (PNP)

Plastic-Encapsulate Transistor

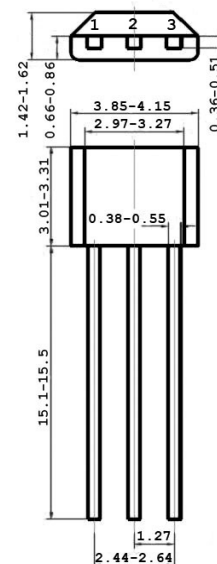
FEATURES

Power dissipation

$$P_{CM} : 0.2W (T_a=25^{\circ}C)$$

TO-92S

1. EMITTER
2. COLLECTOR
3. BASE



UNIT:mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

Parameters	Symbols	Value	UNITS
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-0.15	A
Collector Dissipation	P_C	0.2	W
Junction and Storage Temperature	T_J, T_{stg}	-55-150	°C

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-50			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-50			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-50V, I_E=0$			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-6V, I_C=-2mA$	70		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$			-0.3	V
Transition Frequency	f_T	$V_{CE}=-10V, I_C=-1mA$	80			MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$			7	pF
Noise Figure	NF	$V_{CE}=-6V, I_C=-0.1mA, f=1KHz, R_g=10K\Omega$			10	dB

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y	GR
Range	70-140	120-240	200-400