



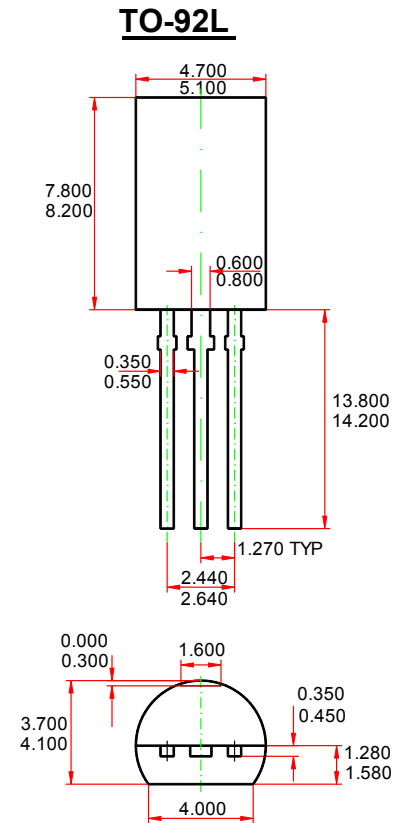
1. EMITTER
2. COLLECTOR
3. BASE

### Features

- ✧ Excellent linearity of Current Gain
- ✧ Low saturation voltage
- ✧ Complementary to TPT5609

### MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V <sub>CB0</sub>	Collector- Base Voltage	-25	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-20	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-1	A
P <sub>C</sub>	Collector Power Dissipation	0.75	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C



Dimensions in inches and (millimeters)

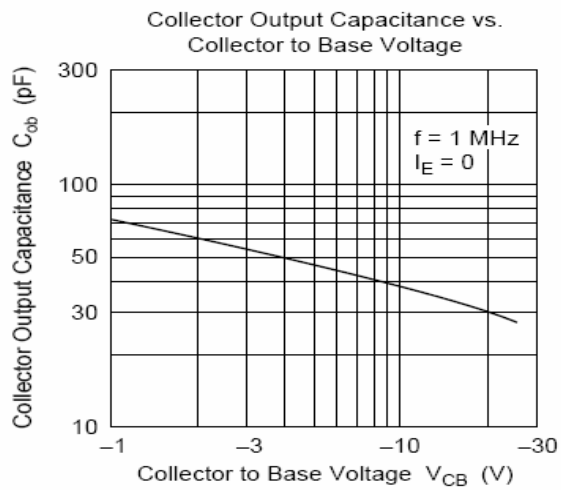
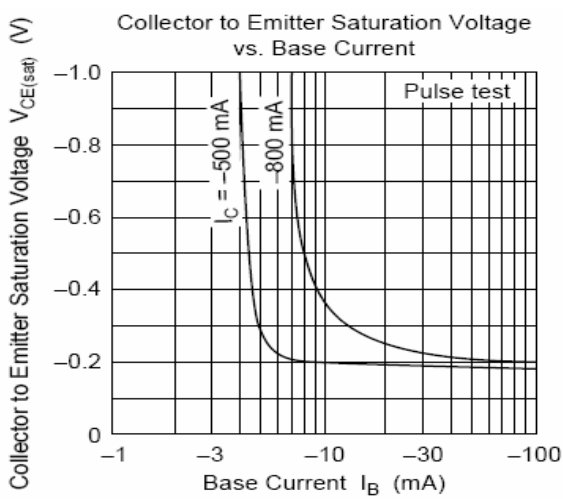
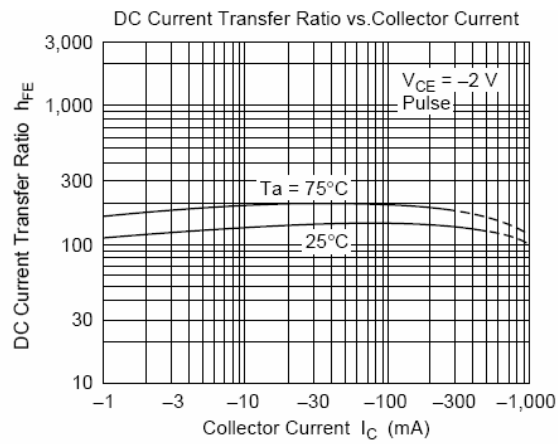
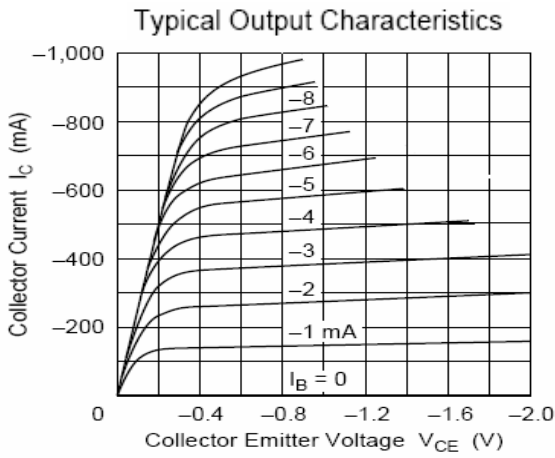
### ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-10μA, I <sub>E</sub> =0	-25			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-20			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-10μA, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> =-20V, I <sub>E</sub> =0			-1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0			-1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =-2V, I <sub>C</sub> =-500mA	60		240	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-800mA, I <sub>B</sub> =-80mA			-0.5	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> =-2V, I <sub>C</sub> =-500mA			-1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-2V, I <sub>C</sub> =-500mA		350		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz		38		pF

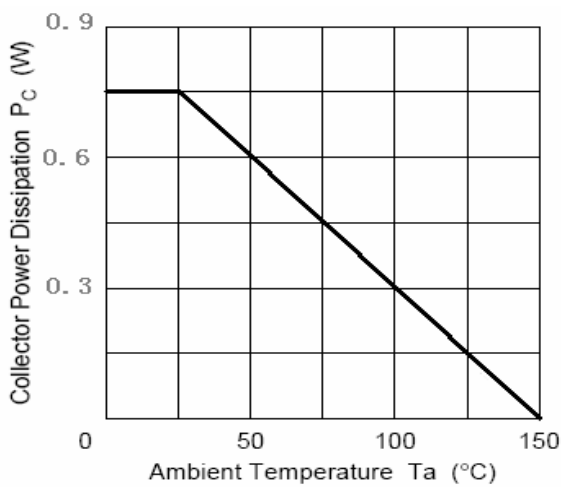
### CLASSIFICATION OF h<sub>FE</sub>

Rank	A	B	C
Range	60-120	85-170	120-240

### Typical Characteristics



### Maximum Collector Dissipation Curve



Package	Packing	Quantity	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92L	Bulk	500pcs/Bag	5000pcs	245×170×100	50,000pcs	525×375×270
TO-92L	Tape	2000pcs/Tap	2000pcs	333×203×42	20,000pcs	493×400×264