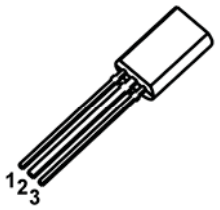
TRANSISTOR (PNP)

FEATURES

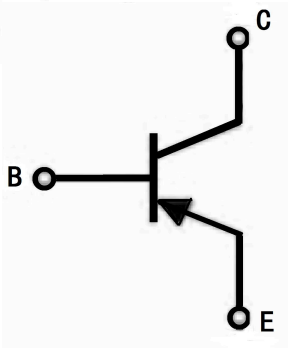
- High DC Current Gain and Excellent hFE Linearity
- Low Saturation Voltage

TO-92L

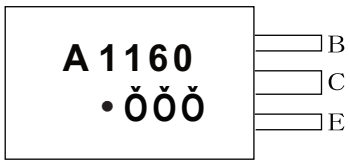


1. E
2. C
3. B

CIRCUIT DIAGRAM



MARKING



A1160=Device code
Soliddot= Greenmolding compound device, if none, the normal device
XXX=Code

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-20	V
V_{CEO}	Collector-Emitter Voltage	-10	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-2	A
P_C	Collector Power Dissipation	900	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	139	℃/W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

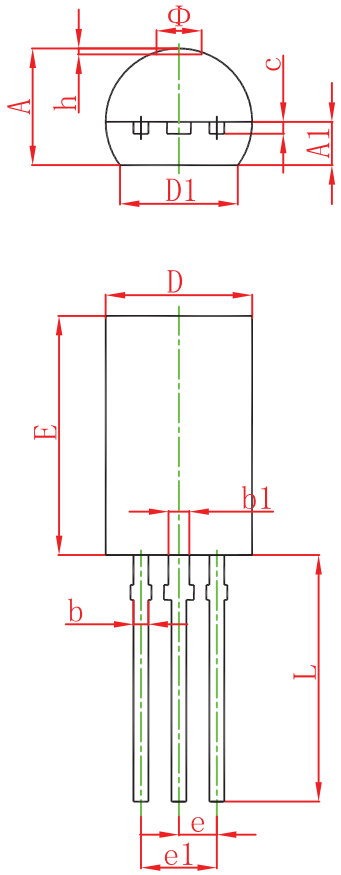
ELECTRICAL CHARACTERISTICS Ta=25 °C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-1mA,I_E=0	-20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-10			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-6V,I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-0.5A	140		600	
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-4A	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A,I_B=-0.05A			-0.5	V
Base-emitter voltage	V_{BE}	V_{CE}=-1V, I_C=-2A			-1.5	V
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz		50		pF
Transition frequency	f_T	V_{CE}=-1V,I_C=-0.5A		140		MHz

CLASSIFICATION OF $h_{FE\ (1)}$

RANK	A	B	C
RANGE	140-280	200-400	300-600

TO-92L PACKAGE OUTLINE DRAWING



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	3.750	4.050	0.148	0.159
A1	1.280	1.580	0.050	0.062
b	0.380	0.550	0.015	0.022
b1	0.620	0.780	0.024	0.031
c	0.350	0.450	0.014	0.018
D	4.750	5.050	0.187	0.199
D1	4.000		0.157	
E	7.850	8.150	0.309	0.321
e	1.270 TYP.		0.050 TYP.	
e1	2.440	2.640	0.096	0.104
L	13.800	14.200	0.543	0.559
Φ		1.600		0.063
h	0.000	0.300	0.000	0.012