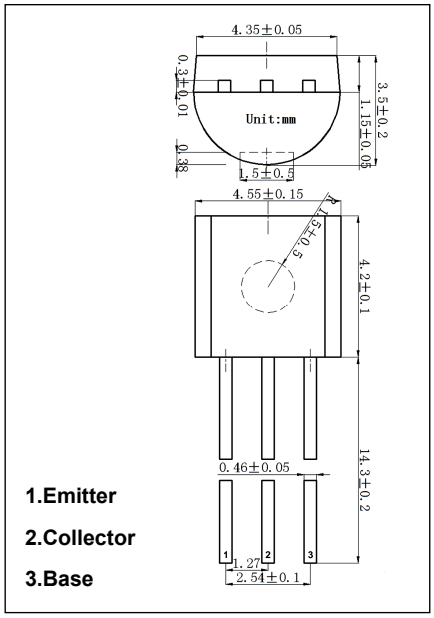
TO-92 Plastic-Encapsulate Transistors

ALJD882P01 NPN Transistors



Features

■ Power dissipation

Marking: **ALJD882P01**

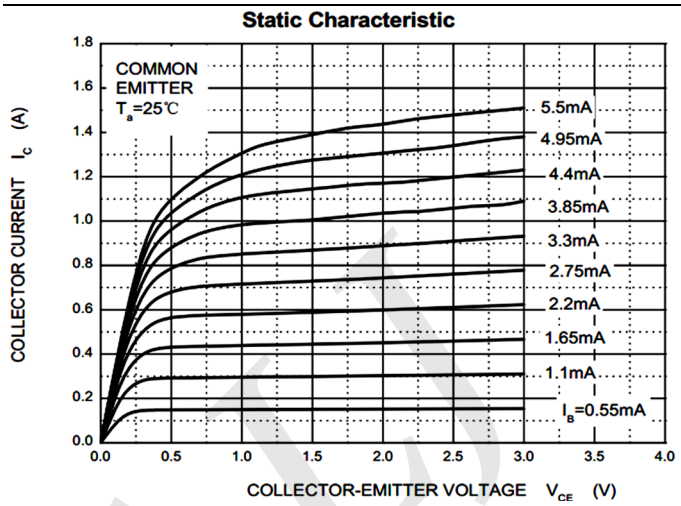
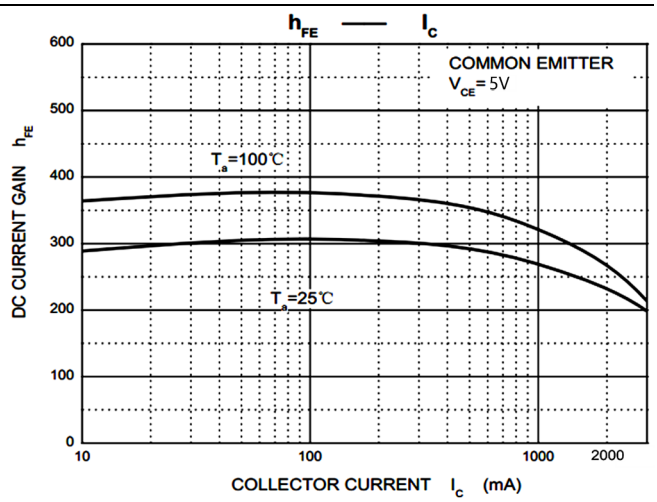
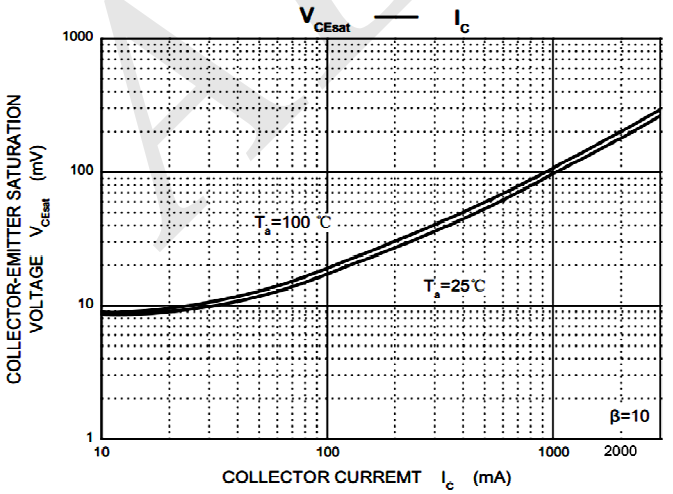
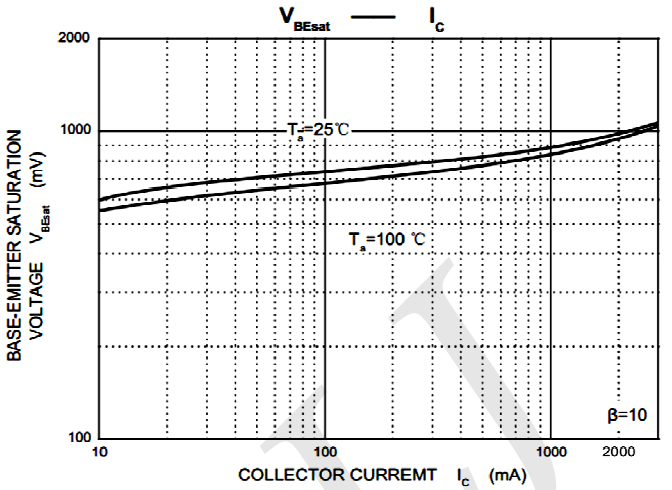
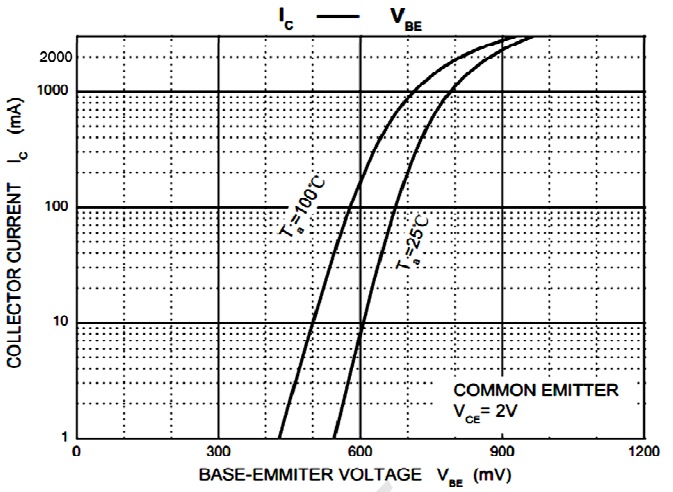
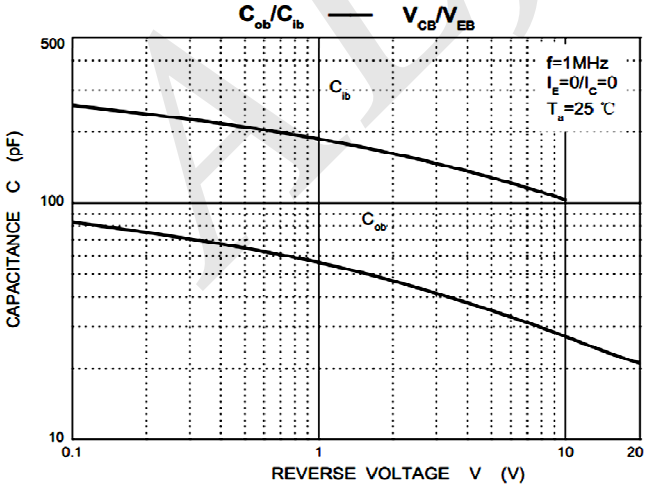
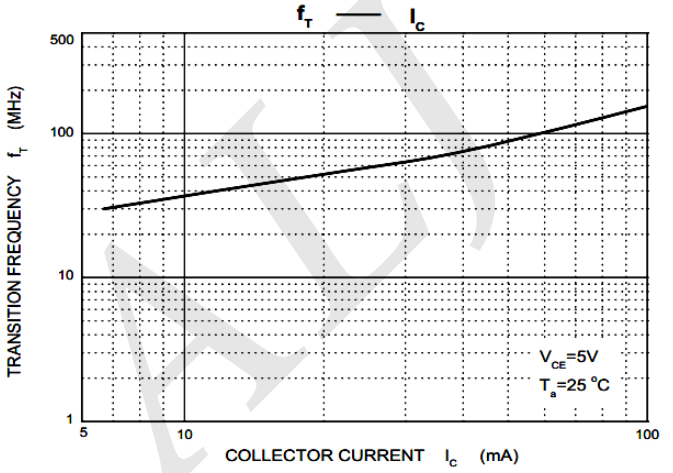
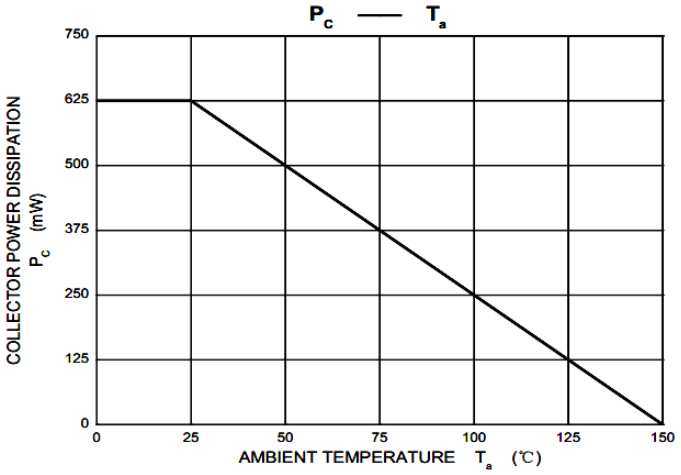
Maximum Ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector Base Voltage	40	V
V_{CEO}	Collector Emitter Voltage	30	V
V_{EBO}	Emitter Base Voltage	6	V
I_C	Collector Current	2	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	- 55 to +150	°C

Electrical Characteristics (T_a=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=100μA,I_E=0	40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA,I_B=0	30			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=100μA,I_C=0	6			V
I_{CBO}	Collector cut-off current	V_{CB}=40V,I_E=0			1	μA
I_{CEO}	Collector cut-off current	V_{CE}=30V, I_B=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=6V,I_C=0			1	μA
$h_{FE(1)}$	DC current gain	V_{CE}=5V, I_C=1mA	60			
$h_{FE(1)}$		V_{CE}=2V, I_C=1A	60		400	
$V_{CE(sat)}$	Collector-emitter saturation voltage	I_C=2A,I_B=0.2A			0.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	I_C=2A,I_B=0.2A			1.5	V
f_T	Transition frequency	V_{CE}=5V,I_C=0.1A,f=10MHz	50	80		MHz

Classification OF $h_{FE(1)}$

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

Typical Characteristics