

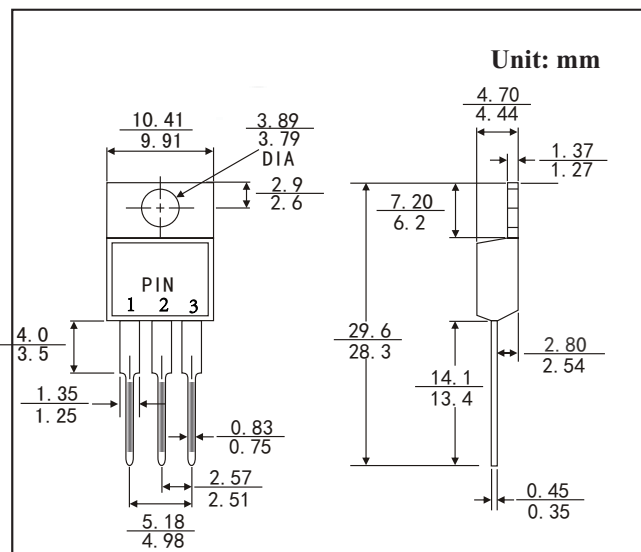
TO-220AB Plastic-Encapsulate Transistors(NPN)

Features

- Compact electronic energy-saving lamp
- Electronic ballast
- General power switch circuit

Mechanical data

- Case: TO-220AB
- Approx. Weight: 2.04g (0.07oz)
- Lead free finish, RoHS compliant
- Case Material: “Green” molding compound, UL flammability classification 94V-0. “Halogen-free”.



MAXIMUM RATINGS AND CHARACTERISTICS @ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	700	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	9	V
Collector Current -Continuous	I_C	8	A
Collector Power Dissipation	P_C	2	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C

Electrical Specification (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test Conitions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	700			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	9			V
Collector cut-off current	I_{CBO}	$V_{CB}=700V, I_E=0$			100	μA
Collector cut-off current	I_{CEO}	$V_{CE}=400V, I_B=0$			100	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=9V, I_C=0$			100	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=2A$	10		40	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=8A$	5			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	$I_C=2A, I_B=0.4A$			1	V
	$V_{CE(sat)2}$	$I_C=5A, I_B=1A$			2	V
	$V_{CE(sat)3}$	$I_C=8A, I_B=2A$			3	V
Base-emitter saturation voltage	$V_{BE(sat)1}$	$I_C=2A, I_B=0.4A$			1.2	V
	$V_{BE(sat)2}$	$I_C=5A, I_B=1A$			1.6	V
Storage time	t_S	$I_C=500mA$	3		6	μs
Fall time	t_f	$I_C=500mA$			0.5	μs
Transition frequency	f_T	$V_{CE}=10V, I_C=0.5A, f=1MHz$	4			MHz

RATINGS AND CHARACTERISTIC CURVES

Static Characteristic

