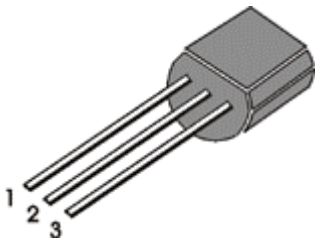
NPN SILICON TRANSISTOR

■ HIGH VOLTAGE TRANSISTSOR
- Collector-Emitter Voltage: V_{CEO}=300V
- Collector Dissipation: P_C(max)=625mW
- Complementary to MPSA92

TO-92



1.Emitter 2.Base 3.Collector

■ ABSOLUTE MAXIMUM RATINGS (T_A=25℃)

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	500	mA
Collector Dissipation	P_C	625	mW
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	150	℃

■ ELECTRICAL CHARACTERISTICS (T_A=25℃)

Characteristic	Symbol	Test Conditions	MIN.	MAX.	Unit
Collector–Base Breakdown Voltage	BV_{CBO}	I_C=100uA, I_E=0	300		V
⋆Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1mA, I_B=0	300		V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=100uA, I_C=0	6		V
Collector Cut-Off Current	I_{CBO}	V_{CB}=200V, I_E=0		100	nA
Emitter Cut-off Current	I_{EBO}	V_{BE}=6V, I_C=0		100	nA
⋆DC Current Gain	h_{FE}	V_{CE}=10V, I_C=1mA	25		
		V_{CE}=10V, I_C=10mA	40		
		V_{CE}=10V, I_C=30mA	40		
⋆Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=20mA, I_B=2mA		0.5	V
⋆Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=20mA, I_B=2mA		0.9	V
Collector-Base Capacitance	C_{CB}	V_{CB}=20V, I_E=0, f=1MHz		3	pF
Current Gain Bandwidth Product	f_T	V_{CE}=20V, I_C=10mA, f=100MHz	50		MHz

⋆Pulse Test: PW ≤ 300us, Duty Cycle ≤ 2%