

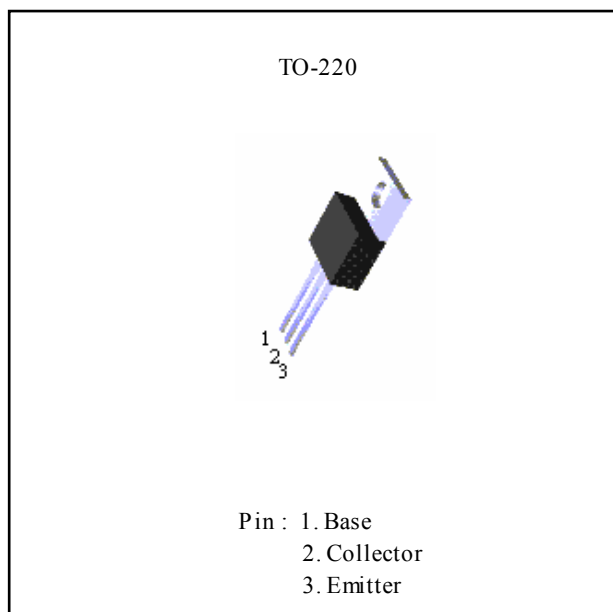
NPN Epitaxial Silicon Transistor

HIGH VOLTAGE SWITCH MODE APPLICATION

- High Speed Switching
- Suitable for Switching Regulator and Motor Control

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Collector Emitter Voltage(V _{BE} =1.5V)	V _{CEV}	700	V
Collector Emitter Voltage(open base)	V _{CEO}	400	V
Emitter Base Voltage(open collector)	V _{EBO}	9	V
Collector Current (DC)	I _c	3	A
Collector Current (Pulse)	I _c	6	A
Base Current	I _B	2	A
Collector Dissipation	P _c	75	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-65 ~150	°C



ORDERING INFORMATION

Device	Operating Temperature	Package
PJ13005CZ	-20°C ~+85°C	TO-220

ELECTRICAL CHARACTERISTICS(Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
*Collector Emitter Sustaining Voltage	V _{CEO(SUS)}	I _c = 10mA, I _B = 0	400			V
Emitter Cutoff Current	I _{EBO}	V _{EB} =9V, I _c =0			1	mA
*DC Current Gain	h _{FE}	V _{CE} =5V, I _c =1A	10		60	
		V _{CE} =5V, I _c =2A	8		40	
*Collector Emitter Saturation Voltage	V _{CE (sat)}	I _c =1A, I _B =0.2A			0.5	V
		I _c =2A, I _B =0.5A			0.6	V
		I _c =4A, I _B =1A			1.0	V
*Base Emitter Saturation Voltage	V _{BE (sat)}	I _c =1A, I _B =0.2A			1.2	V
		I _c =2A, I _B =0.5A			1.6	V
Turn On Time	t _{on}	V _{CC} =125V, I _c =2A			0.8	μ S
Storage Time	t _s	I _{B1} =-I _{B2} =0.4A			4	μ S
Fall Time	t _f				0.9	μ S

- Pulse Test: PW ≤300 μ S, Duty Cycle =1.5 %

TO-220 Unit:mm

