

MJE13005 (4A)

The NPN high-voltage switch

transistor

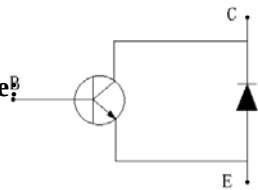
- **use:**

Mainly used for energy-saving lamps, fluorescent lamp electronic ballast, mainly used for energy-saving lamps, fluorescent lamp electronic ballast

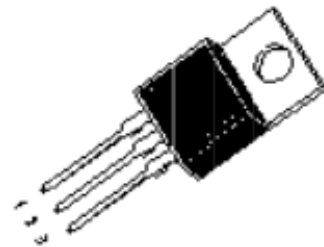
- **feature:**

Maximum collector current I_{CM} : 4A

- **inner structure:**



TO-220



- **Packaging form:**

TO-220

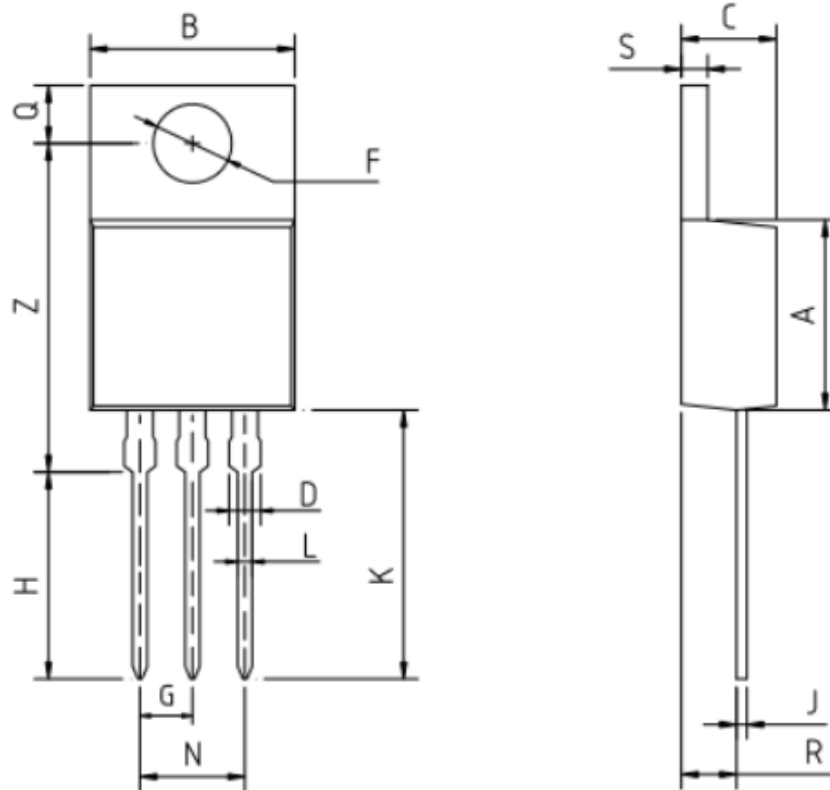
- **electrical characteristics ($T_a=25^\circ\text{C}$)**

Parameter name	symbol	test condition	least value	crest value	representative value	unit
Collector-base reverse current	I_{CBO}	$V_{CB}=670V$		1		μA
Emitter-base reverse current	I_{EBO}	$V_{EB}=9V$		1		μA
Collector-base electrode breakdown voltage	BV_{CBO}	$I_C=0.1mA$	700		780	V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C=1mA$	410	520	480	V

Transmitter-base pole breakdown voltage	BV_{EBO}	$I_E=0.1\text{m A}$	9			V
DC current gain	h_{FE}	$V_{CE}=5\text{V}, I_C=0.5\text{A}$	15	30		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2\text{A}, I_B=0.5\text{A}$		0.5		V
period of storage	t_s	$I_C=0.5\text{A}, UI9600$	2	3.5		μs

Size diagram of TO-220

unit:mm



symbol	least value	representative value	crest value
A	8.8	9	9.2
B	9.5	10	10.5
C	4.5	4.5	4.8
D	1.2	1.25	1.3
F	Φ 3.4	Φ 3.6	Φ 3.8
G		2.54	
H	9.5	10	10.5
J	0.43	0.45	0.47
K	13	13.5	14
L	0.75	0.8	0.85
N		5.08	

Q	2.7	2.8	2.9
R	2.7	2.75	2.8
S	1.2	1.25	1.3
Z	15.7	15.9	16.1