

isc Silicon NPN Power Transistor

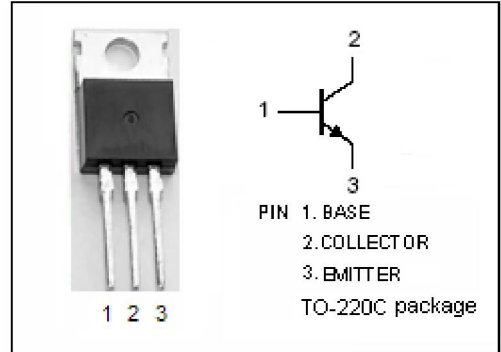
BUL741

DESCRIPTION

- Collector–Emitter Breakdown Voltage
: $V_{(BR)CEO} = 400V(\text{Min.})$
- Collector Saturation Voltage
: $V_{CE(sat)} = 0.5V(\text{Max}) @ I_C = 0.7A$

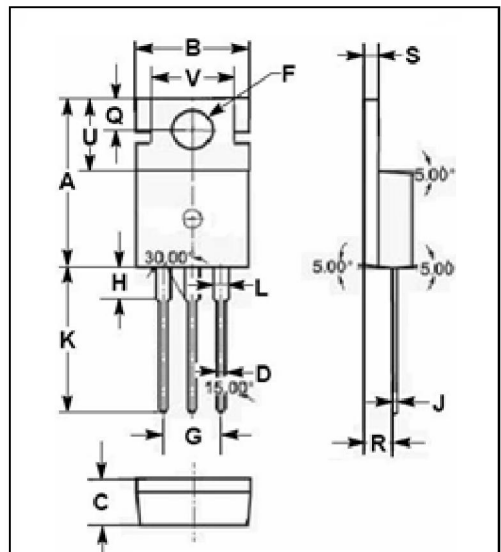
APPLICATIONS

- Designed for electronic lamp ballast circuits switch-mode power supplies applications.



ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CEs}	Collector-Emitter Voltage	1050	V
V _{CEO}	Collector-Emitter Voltage	400	V
V _{EBO}	Emitter-Base Voltage	15	V
I _C	Collector Current-Continuous	2.5	A
I _{CM}	Collector Current-peak	5	A
I _B	Base Current-Continuous	1.5	A
I _{BM}	Base Current-peak	3	A
P _C	Collector Power Dissipation T _C =25°C	60	W
T _i	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



DIM	mm	
	MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.08	°C/W

isc Silicon NPN Power Transistor**BUL741****ELECTRICAL CHARACTERISTICS****T_c =25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 10mA; I _B = 0	400	450		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	15	19	24	V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 0.7A; I _B = 0.14A			0.5	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C =2A; I _B = 0.6A			1.5	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C =2A; I _B = 0.6A			1.5	V
I _{CES}	Collector Cutoff Current	V _{CEs} = 1050V; V _{EB} =0			10	μ A
h _{FE-1}	DC Current Gain	I _C =0.1 A; V _{CE} = 5V	48		100	
h _{FE-2}	DC Current Gain	I _C = 0.45A; V _{CE} = 3V	25	35		