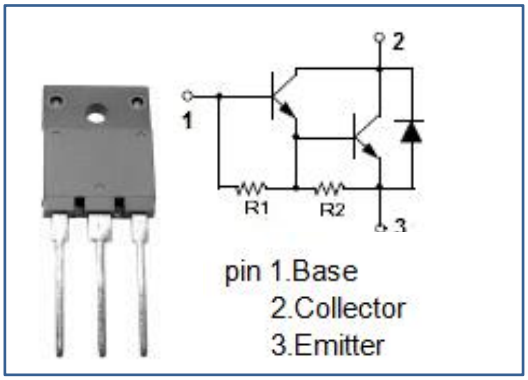
ISB3015
eq BU941PFI
isc Silicon NPN Power Transistor

DESCRIPTION

- Collector-Emitter Breakdown Voltage

  -$V_{(BR)CEO}$= 400V(Min)



APPLICATIONS

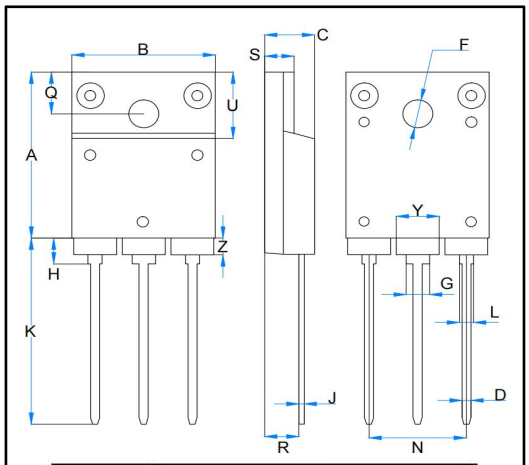
- Designed for power amplifier
- high speed switching and regulated power supply applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_{CM}	Collector Peak Current	30	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation	65	W
T_J	Junction Temperature	175	℃
T_{stg}	Storage Temperature Range	-65~175	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	2.3	℃/W



DIM	mm		
	MIN	TYP.	MAX
A	19.90	20.00	20.10
B	15.90	16.00	16.10
C	5.50	5.60	5.70
D	0.90	1.00	1.10
F	3.30	3.40	3.50
G	2.90	3.00	3.10
H	5.90	6.00	6.10
J	0.50	0.60	0.70
K	22.30	22.40	22.50
L	1.90	2.00	2.10
N	10.80	10.90	11.00
Q	4.90	5.00	5.10
R	3.75	3.85	3.95
S	3.20	3.30	3.40
U	7.90	8.00	8.10
Y	4.70	4.80	4.90
Z	1.90	2.00	2.10

ELECTRICAL CHARACTERISTICS （T_C=25℃ unless otherwise specified）

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V_{CEO}	Collector-Emitter Breakdown Voltage	I_C=100mA; I_B= 0	400	--	V
I_{CEO}	Collector Cut offCurrent	V_{CB} = 450V; I_E= 0	--	100	uA
I_{EBO}	Emitter Cutoff Current	V_{EB} = 5V; I_C= 0	--	20	mA
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8A; I_B=0.1A	--	1.6	V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B=0.25A	--	1.8	V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C=12A; I_B=0.3A	--	2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C=8A; I_B=0.1A	--	2.2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C=10A; I_B=0.25A	--	2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 12A; I_B=0.3A	--	2.7	V
h_{FE}	DC Current Gain	I_C= 5A; V_{CE}= 10V	300		
V_F	Diode Forward Voltage	I_F = 10 A		2.5	V

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