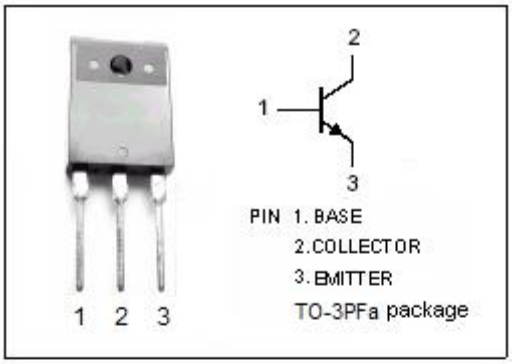
isc Silicon NPN Power Transistor 2SC5411

DESCRIPTION

- With TO-3PFa packaging
- High collector-base voltage
- High power dissipation
- Low saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

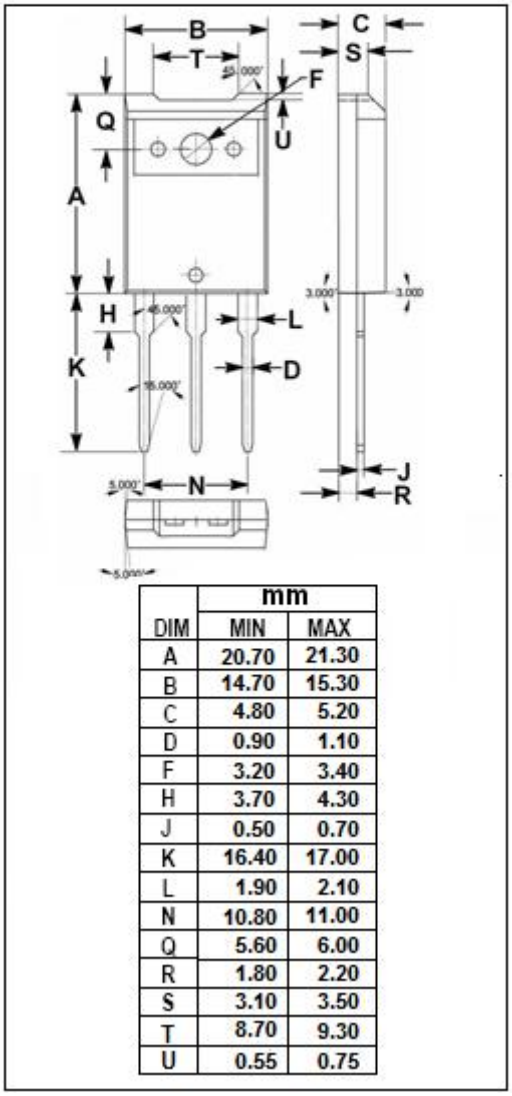


APPLICATIONS

- Power amplifier applications

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	14	A
I_{CM}	Collector Current-Peak	28	A
I_B	Base Current- Continuous	7	A
P_C	Collector Power Dissipation @ T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	20.70	21.30
B	14.70	15.30
C	4.80	5.20
D	0.90	1.10
F	3.20	3.40
H	3.70	4.30
J	0.50	0.70
K	16.40	17.00
L	1.90	2.10
N	10.80	11.00
Q	5.60	6.00
R	1.80	2.20
S	3.10	3.50
T	8.70	9.30
U	0.55	0.75

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
BV_{CBO}	Collector-Base Breakdown Voltage	I_C= 0.1mA ; I_E= 0	1500			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C= 1mA ; I_B= 0	600			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= 0.1mA ; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 11A; I_B= 2.75A			3	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 11A; I_B= 2.75A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 1500V ; I_E= 0			1	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			10	μA
h_{FE-1}	DC Current Gain	I_C= 2A ; V_{CE}= 5V	10		40	
h_{FE-2}	DC Current Gain	I_C= 11A ; V_{CE}= 5V	4		8	

Classification of h_{FE}

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700