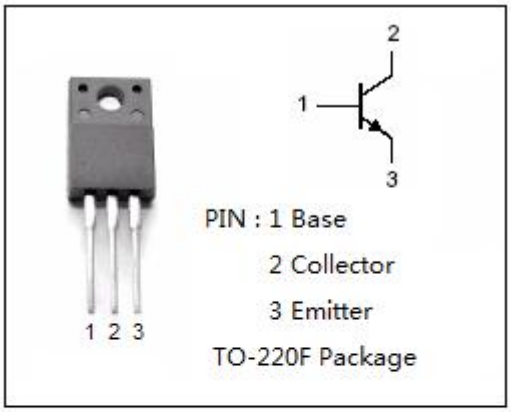
isc Silicon NPN Power Transistor — 2SD2396

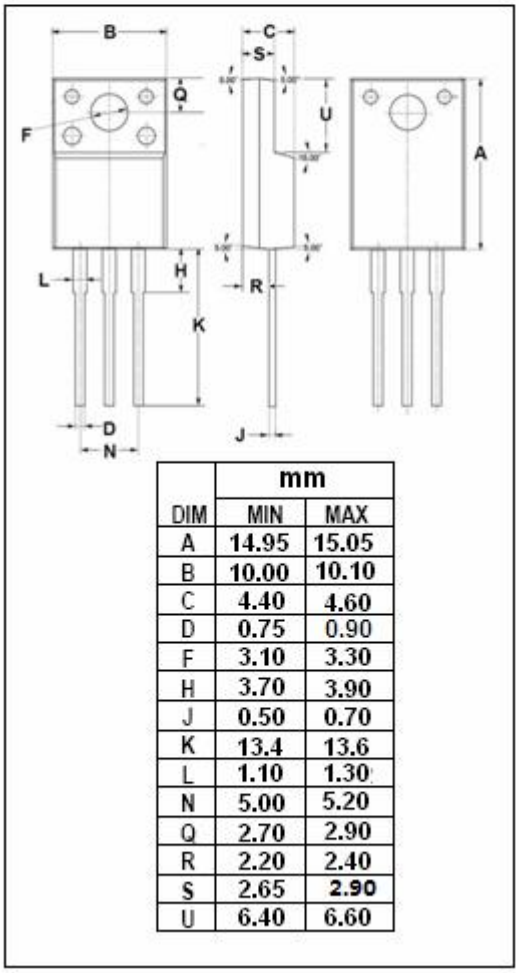


DESCRIPTION

- Low Collector Saturation Voltage
- High DC current gain
- Large collector power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier



DIM	mm MIN	mm MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Pulse	6	A
P_C	Collector Power Dissipation @ T_C=25℃	30	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA ; I_B= 0	60			V
$V_{CE(sat)}$*	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.05A			0.8	V
$V_{BE(sat)}$*	Base-Emitter Saturation Voltage	I_C= 2A; I_B= 0.05A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 60V; I_E= 0			1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 6V; I_C= 0			1	μA
h_{FE}*	DC Current Gain	I_C= 0.5A ; V_{CE}= 4V	400		2K	
f_T	Current-Gain—Bandwidth Product	I_E= 0.2A ; V_{CE}= 5V		40		MHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V;f_{test}= 1.0MHz		55		pF

***:Single pulse test**

◆ **h_{FE} Classification**

Class	H	J	K
h_{FE}	400-800	600-1200	1K-2K