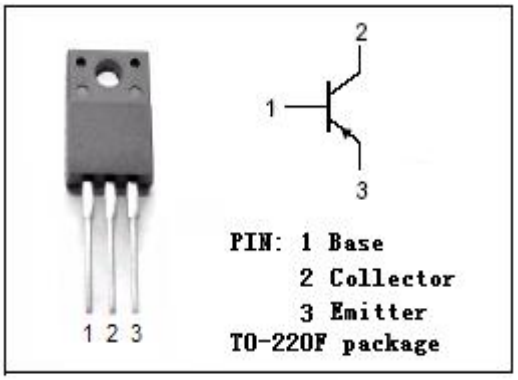
isc Silicon PNP Power Transistor — 2SB1642

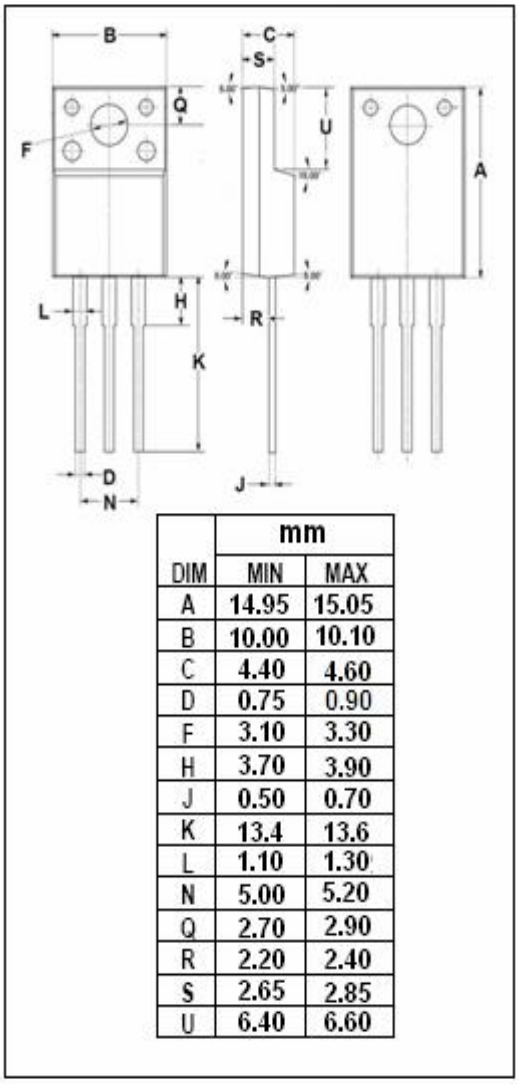
DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -60V(Min)
- Collector Power Dissipation-
  : P_C= 25 W@ T_C= 25℃
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= −1.5V(Max)@ (I_C= -2.5A, I_B= -0.25A)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for audio frequency power amplifier applications.



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	2.85
U	6.40	6.60

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-4	A
I_B	Base Current-Continuous	-1	A
P_C	Collector Power Dissipation @T_a=25℃	2	W
	Collector Power Dissipation @T_C=25℃	25	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -10mA ; I_B= 0	-60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -2.5A; I_B= -0.25A			-1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -0.5A ; V_{CE}= -5V			-1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -60V ; I_E= 0			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -7V; I_C= 0			-10	μA
h_{FE-1}	DC Current Gain	I_C= -0.5A ; V_{CE}= -5V	100		320	
h_{FE-2}	DC Current Gain	I_C= -3A ; V_{CE}= -5V	20			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= -10V; f_{test}= 1MHz		50		pF
f_T	Current-Gain—Bandwidth Product	I_C= -0.5A ; V_{CE}= -5V		9		MHz