

isc Silicon PNP Power Transistor

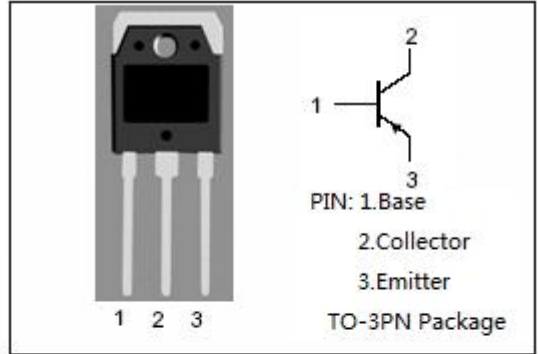
2SA1516

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -180V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SC3907

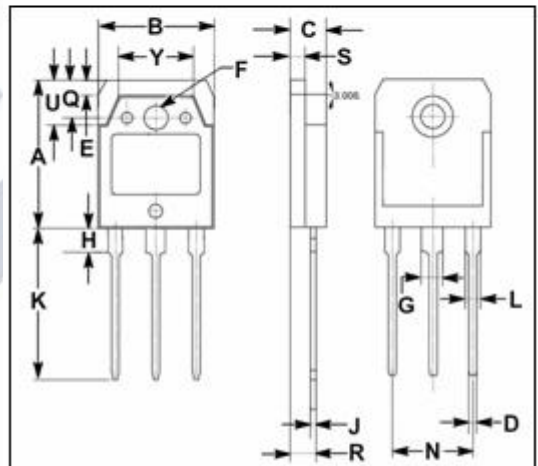
APPLICATIONS

- Power amplifier applications
- Recommend for 80W high fidelity audio frequency amplifier output stage applications



ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-180	V
V_{CEO}	Collector-Emitter Voltage	-180	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-12	A
I_B	Base Current-Continuous	-1.2	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	130	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



DIM	mm	
	MIN	MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -50mA ; I _B = 0	-180			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -8A ; I _B = -0.8A			-3.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -7A ; V _{CE} = -5V			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -180V ; I _E = 0			-5	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V ; I _C = 0			-5	μ A
h _{FE-1}	DC Current Gain	I _C = -1A ; V _{CE} = -5V	55		180	
h _{FE-2}	DC Current Gain	I _C = -7A ; V _{CE} = -5V	35			
C _{OB}	Output Capacitance	I _E =0 ; V _{CB} = -10V ; f _{test} = 1.0MHz		470		pF
f _T	Current-Gain—Bandwidth Product	I _C =-1A ; V _{CE} = -5V		25		MHz

◆ **h_{FE-1} Classifications**

R	O
55-110	90-180