

isc Silicon PNP Power Transistor

2SB817

DESCRIPTION

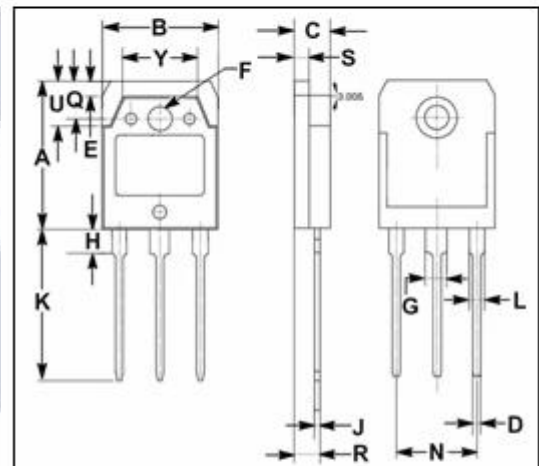
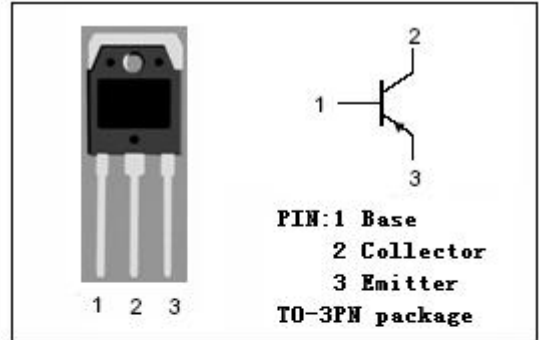
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -140V(\text{Min})$
- Good Linearity of h_{FE}
- High Current Capability
- Wide Area of Safe Operation
- Complement to Type 2SD1047

APPLICATIONS

- Recommend for 60W audio frequency amplifier output stage applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-140	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-12	A
I_{CP}	Collector Current-Pulse	-15	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	100	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-40~150	$^\circ\text{C}$



DIM	mm	
	MIN	MAX
A	19.60	20.10
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	20.00	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	6.10
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 = -30mA ; R _{BE} =∞	-140			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = -5mA; I _E = 0	-160			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -5mA; I _C = 0	-6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -5.0A; I _B = -0.5A			-2.5	V
V _{BE(on)}	Base -Emitter On Voltage	I _C = -1A ; V _{CE} = -5V			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -80V ; I _E =0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -4V; I _C =0			-100	μ A
h _{FE-1}	DC Current Gain	I _C = -1A ; V _{CE} = -5V	60		200	
h _{FE-2}	DC Current Gain	I _C = -6A ; V _{CE} = -5V	20			
C _{OB}	Output Capacitance	I _E =0 ; V _{CB} = -10V; f _{test} = 1.0MHz		300		pF
f _T	Current-Gain—Bandwidth Product	I _C =-1A ; V _{CE} = -5V		15		MHz

Switching times

t _{on}	Turn-on Time	I _C = -1A ,R _L = 20 Ω , I _{B1} = -I _{B2} = -0.1A,V _{CC} =-20V		0.25		μ s
t _{stg}	Storage Time			1.61		μ s
t _f	Fall Time			0.53		μ s

◆ h_{FE-1} Classifications

D	E
60-120	100-200