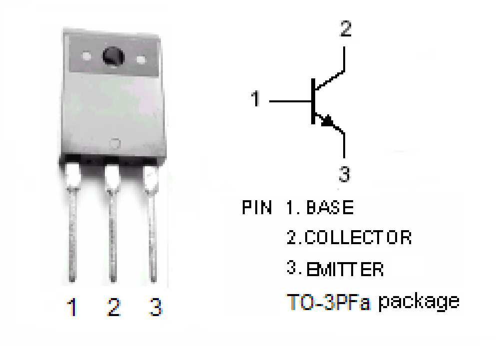
isc Silicon NPN Power Transistor 2SD1716



DESCRIPTION

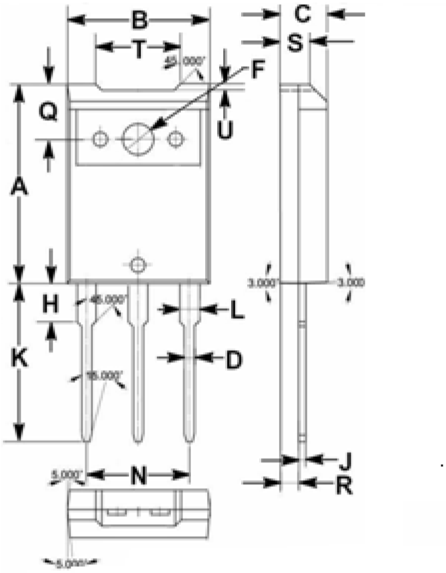
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 160V(Min.)
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Complement to Type 2SB1161

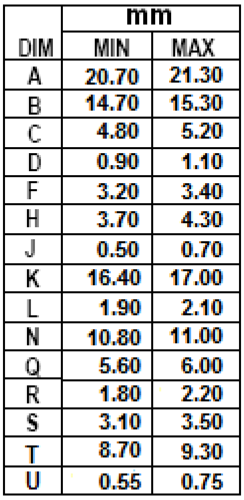
APPLICATIONS

- Designed for high power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	12	A
I_{CP}	Collector Current-Pulse	20	A
P_C	Collector Power Dissipation @ T_C=25℃	120	W
	Collector Power Dissipation @ T_a=25℃	3	
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
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 8A; I_B= 0.8A			2.0	V
$V_{BE(on)}$	Base -Emitter On Voltage	I_C= 8A; V_{CE}= 5V			1.8	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 160V; I_E= 0			50	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 3V; I_C= 0			50	μA
h_{FE-1}	DC Current Gain	I_C= 20mA; V_{CE}= 5V	20			
h_{FE-2}	DC Current Gain	I_C= 1A; V_{CE}= 5V	60		200	
h_{FE-3}	DC Current Gain	I_C= 8A; V_{CE}= 5V	20			
C_{OB}	Collector Output Capacitance	I_E= 0; V_{CB}= 10V; f= 1MHz		250		pF
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 5V		20		MHz

◆ h_{FE-2} Classifications

Q	S	P
60-120	80-160	100-200