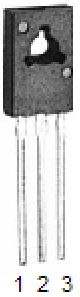
isc Silicon NPN Power Transistor 2SD1506

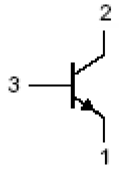
DESCRIPTION

- Low Collector Saturation Voltage
  : $V_{CE(sat)}$= 1.0V(Max)@I_C= 2A
- Wide Area of Safe Operation
- Complement to Type 2SB1065

APPLICATIONS

- Designed for low frequency power amplifier applications.

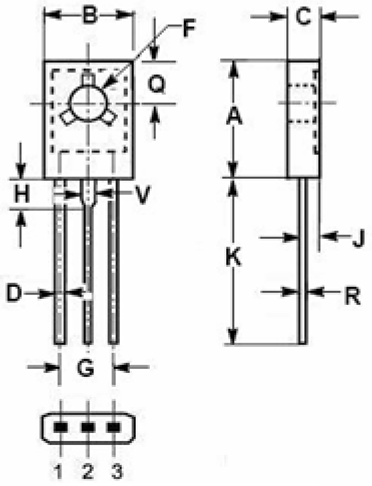


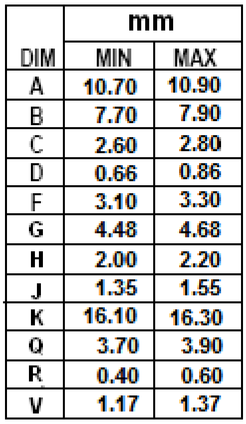


PIN 1. EMITTER
2.COLLECTOR
3. BASE
TO-126 package

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Peak	4.5	A
P_C	Total Power Dissipation @ T_a=25℃	1.2	W
	Total Power Dissipation @ T_C=25℃	10	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃





	mm	
DIM	MIN	MAX
A	10.70	10.90
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	16.10	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

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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	50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 50μA; I_E= 0	60			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 50μA; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.2A			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 2A; I_B= 0.2A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 40V; I_E= 0			1.0	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1.0	μA
h_{FE}	DC Current Gain	I_C= 0.5A; V_{CE}= 3V	56		390	
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 5V		90		MHz
C_{OB}	Output Capacitance	I_E=0; V_{CB}= 10V; f= 1MHz		40		pF

◆ **h_{FE} Classifications**

N	P	Q	R
56-120	82-180	120-270	180-390