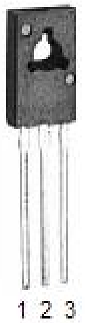
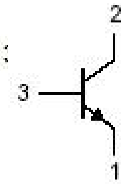
isc Silicon NPN Power Transistor 2SD600

DESCRIPTION

- High Collector Current-I_C= 1.0A
- High Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 100V(Min)
- Good Linearity of h_{FE}
- Low Saturation Voltage
- Complement to Type 2SB631
- Minimum Lot-to-Lot variations for robust device performance and reliable operation





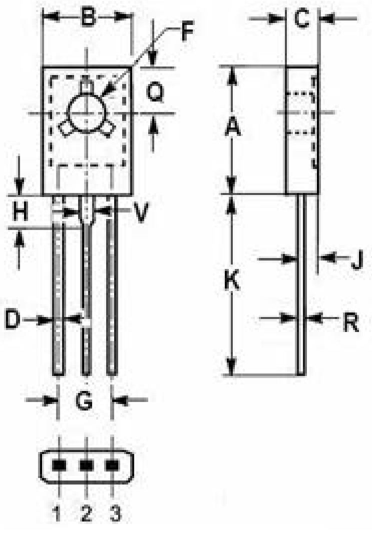
PIN: 1.Emitter
2.Collector
3.Base
TO-126 Package

APPLICATIONS

- Designed for power amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1	A
I_{CP}	Collector Current-Pulse	2	A
P_C	Collector Power Dissipation @ T_C=25℃	8	W
	Collector Power Dissipation @ T_a=25℃	1	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	10.70	10.95
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	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 10 μA ; I_E= 0	100			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA ; R_{BE}= ∞	100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Vltage	I_E= 10 μA ; I_C= 0	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 500mA; I_B= 50mA		0.15	0.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 500mA; I_B= 50mA		0.85	1.2	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 50V; I_E= 0			1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C= 0			1	μA
h_{FE-1}	DC Current Gain	I_C= 50mA ; V_{CE}= 5V	60		320	
h_{FE-2}	DC Current Gain	I_C= 500mA ; V_{CE}= 5V	20			
f_T	Current-Gain—Bandwidth Product	I_C= 50mA ; V_{CE}= 10V		130		MHz
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V,f_{test}= 1MHz		20		pF
Switching times						
t_f	Fall Time	I_C= 500mA ,R_L=24Ω , I_{B1}= I_{B2}= 50m A,V_{CE}= 12V		0.1		μs
t_{off}	Turn-Off Time			0.5		μs
t_{stg}	Storage Time			0.7		μs

◆ **h_{FE-1} Classifications**

D	E	F
60-120	100-200	160-320

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