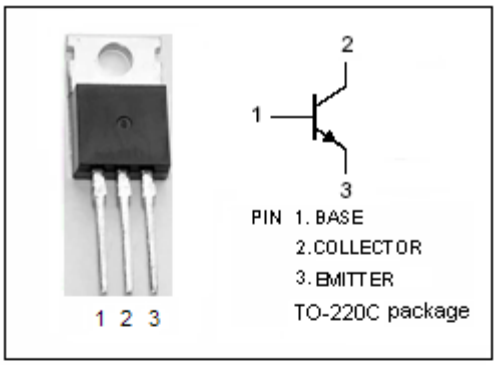
isc Silicon NPN Power Transistor 2SD2027

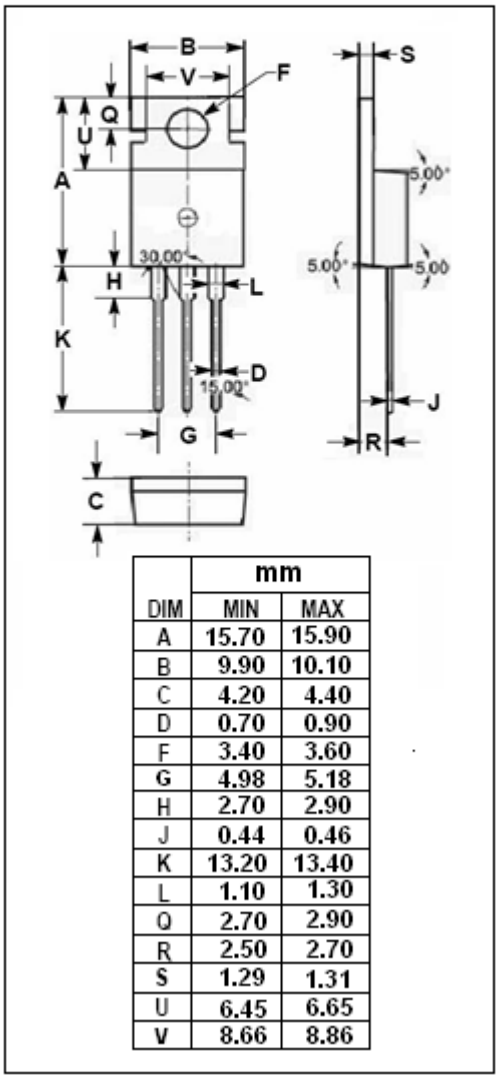


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 60V(Min)
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Complement to Type 2SB1346

APPLICATIONS

- Designed for low frequency and general purpose amplifier applications.



DIM	mm MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	3	A
I_{CM}	Collector Current-Peak	8	A
P_C	Collector Power Dissipation @T_a=25℃	1.75	W
	Collector Power Dissipation @T_C=25℃	30	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 5mA; R_{BE}= ∞	60			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 1mA; I_E= 0	60			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 1mA; I_C= 0	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 0.2A			1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 0.5A; V_{CE}= 5V			1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 40V; I_E=0			100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 4V; I_C=0			100	μA
h_{FE-1}	DC Current Gain	I_C= 0.5A; V_{CE}= 5V	70		280	
h_{FE-2}	DC Current Gain	I_C= 3A ; V_{CE}= 5V	20			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V, f= 1MHz		60		pF
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A ; V_{CE}= 5V		8		MHz

◆ **h_{FE-1} Classifications**

Q	R	S
70-140	100-200	140-280