

isc Silicon NPN Power Transistor

2SD727

DESCRIPTION

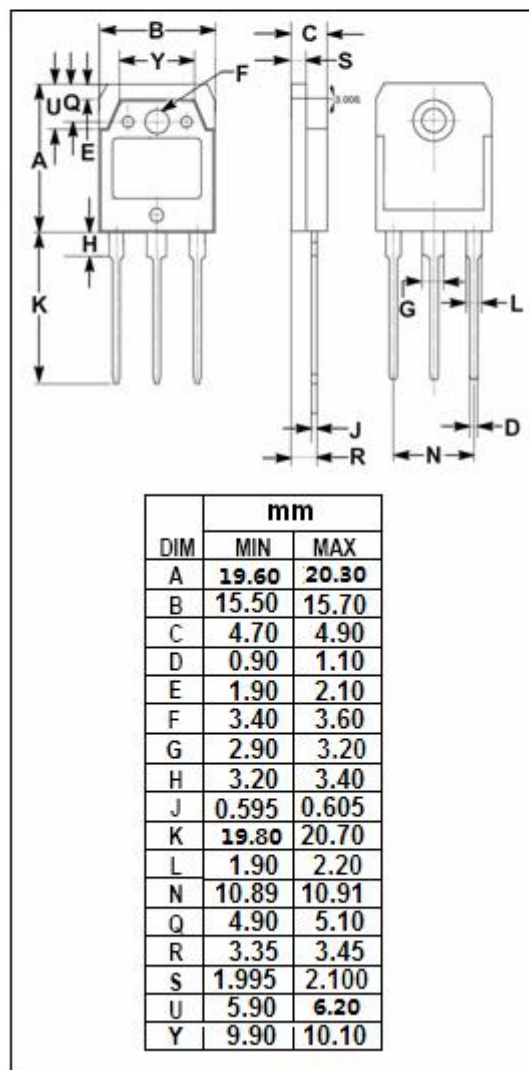
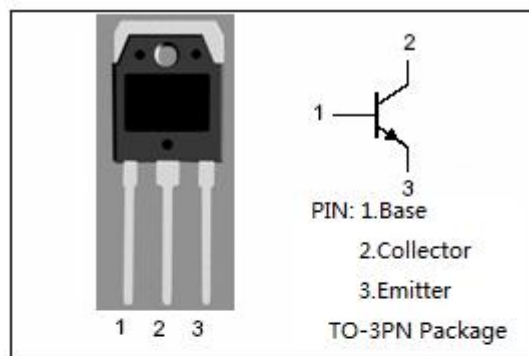
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 80V(\text{Min})$
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Complement to Type 2SB691
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier and power switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	130	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	8	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	60	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SD727****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; I _B = 0	80			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	130			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5A; 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} = 130V; I _E = 0			100	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			100	uA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	60		200	
h _{FE-2}	DC Current Gain	I _C = 4A; V _{CE} = 5V	20			
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 5V		7		MHz
C _{OB}	Output Capacitance	I _E =0; V _{CB} = 10V; f _{test} = 1.0MHz		110		pF

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