

isc Silicon NPN Power Transistor
2SD1763
DESCRIPTION

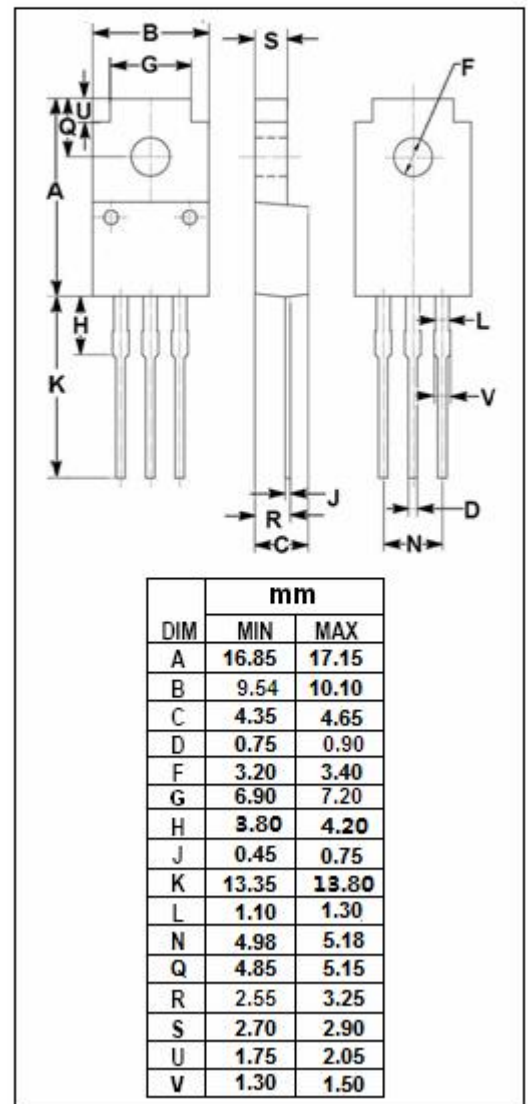
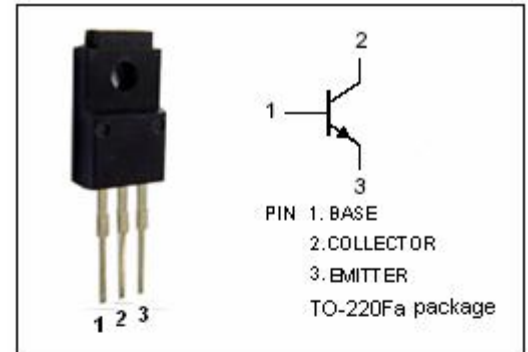
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 120V(\text{Min.})$
- Good Linearity of h_{FE}
- Complement to Type 2SB1186
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Power amplifier applications.
- Driver stage amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Peak	3	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	20	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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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 = 1mA; I _B = 0	120			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 50 μ A; I _E = 0	120			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 50 μ A; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B = 0.1A			0.4	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 100V; I _E = 0			1	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			1	μ A
h _{FE}	DC Current Gain	I _C = 0.1A; V _{CE} = 5V	100		320	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} =1MHz		20		pF
f _T	Current-Gain—Bandwidth Product	I _E = -0.1A; V _{CE} = 5V; f _{test} = 30MHz		80		MHz

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