

isc Silicon PNP Darlington Power Transistor
2SB1145
DESCRIPTION

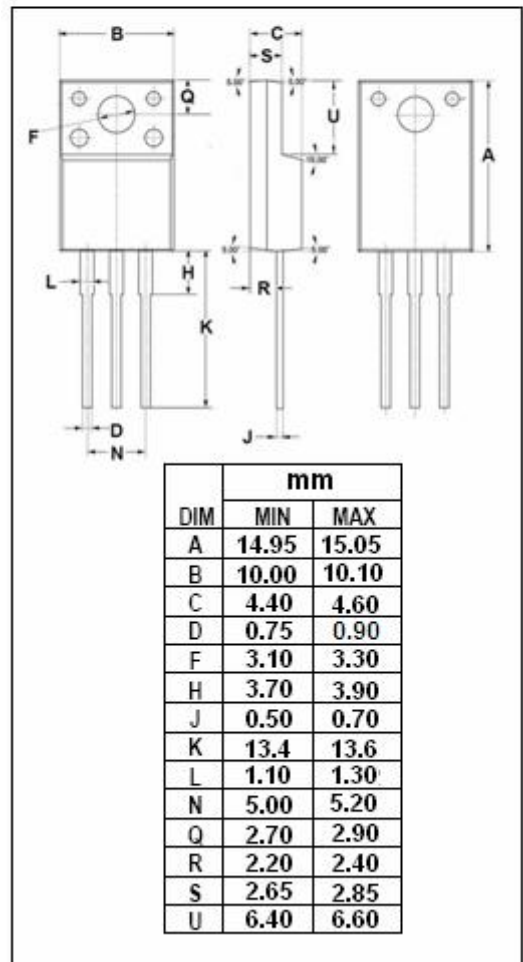
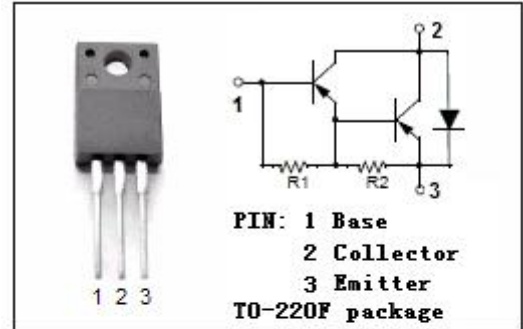
- High DC Current Gain-
: $h_{FE} = 2000(\text{Min.}) @ I_C = -1.5\text{A}$
- Low Collector Saturation Voltage-
: $V_{CE(\text{sat})} = -1.5\text{V}(\text{Max}) @ I_C = -1.5\text{A}$
- Good Linearity of h_{FE}
- With TO-220F package
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High current driver applications.
- Power driver 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	-6	V
I_C	Collector Current-Continuous	-3	A
I_{CM}	Collector Current-Peak	-5	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	20	
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 = -5mA; I _B = 0	-120			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -1.5A; I _B = -3mA			-1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -1.5A; I _B = -3mA			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -120V; I _E = 0			-50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-3.0	mA
h _{FE}	DC Current Gain	I _C = -1.5A; V _{CE} = -3V	2000			

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