

isc Silicon PNP Power Transistor
2SA1643
DESCRIPTION

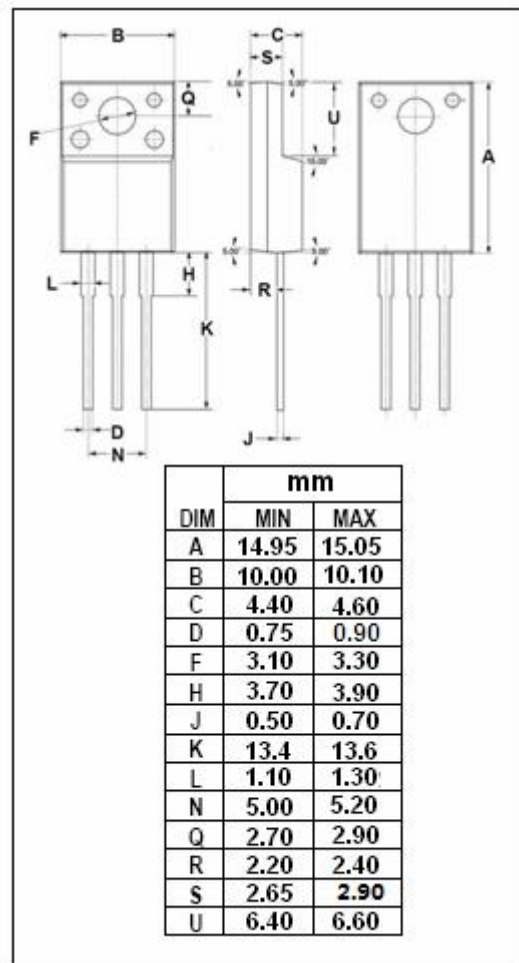
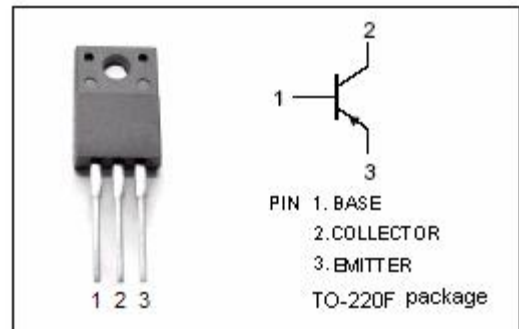
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -35V(\text{Min})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -0.5V(\text{Max})@ (I_C = -5A, I_B = -0.3A)$
- Complement to Type 2SC4327
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-35	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-7	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -25mA; I _B = 0	-35			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-7			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -5A; I _B = -0.3A			-0.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -50V; I _E = 0			-10	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-10	μA
h _{FE}	DC Current Gain	I _C = -5A; V _{CE} = -2V	50			
f _T	Current-Gain—Bandwidth Product	I _E = 1A; V _{CE} = -12V		75		MHz

NOTICE:

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