

isc Silicon PNP Power Transistor

2SA1601

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CE(SUS)} = -40(V)(Min.)$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.3(V)(Max.) @ I_C = -7.5A$
- Large Current Capability- $I_C = -15A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

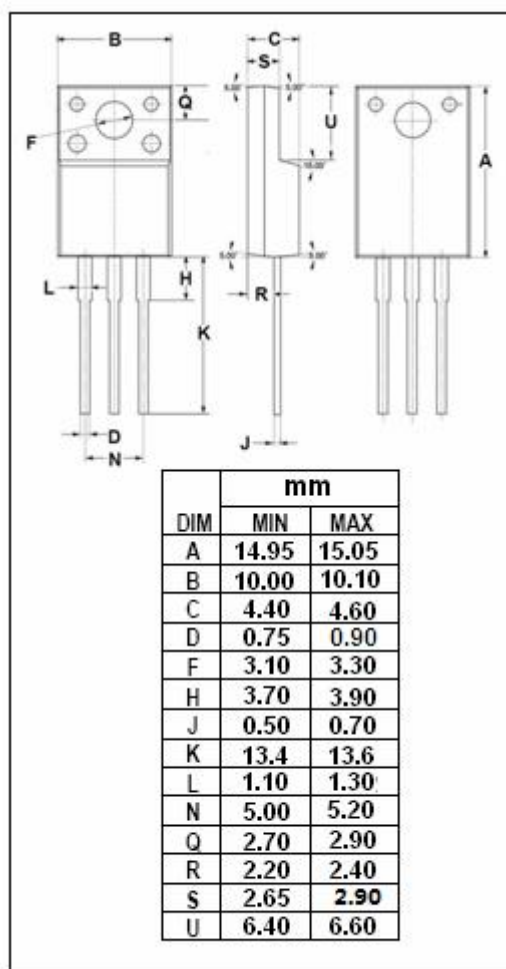
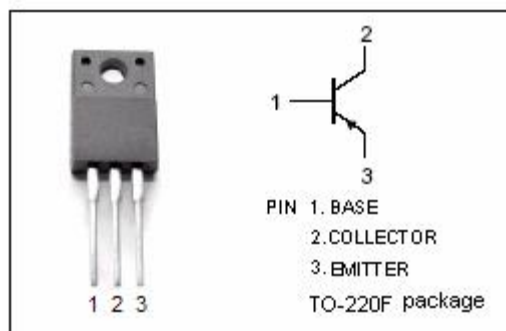
- Designed for mid-switching applications, and is ideal for use as a ramp driver.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-15	A
I_{CM}	Collector Current-Peak	-30	A
I_B	Base Current-Continuous	-2	A
I_{BM}	Base Current-Peak	-3	A
P_C	Total Power Dissipation @ $T_C = 25^\circ C$	45	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	2.77	$^\circ C/W$



isc Silicon PNP Power Transistor**2SA1601****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -10mA; I _B = 0	-40			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -7.5A; I _B = -0.4A			-0.3	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -7.5A; I _B = -0.4A			-1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -60V; I _E = 0			-100	μ A
I _{CEO}	Collector Cutoff Current	V _{CE} = -40V; I _B = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C = 0			-100	μ A
h _{FE}	DC Current Gain	I _C = -7.5A; V _{CE} = -2V	70			

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