

isc Silicon PNP Power Transistor
BD224
DESCRIPTION

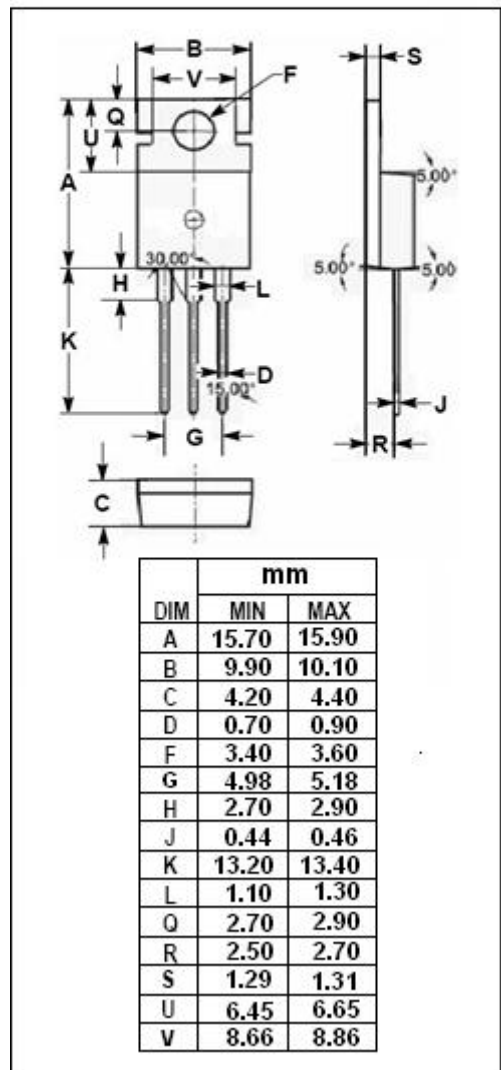
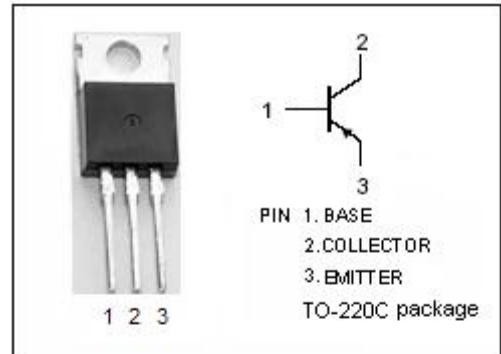
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -40V(\text{Min})$
- DC Current Gain $-h_{FE} = 30(\text{Min}) @ I_C = -0.3A$
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in general purpose power amplifier and switching applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25°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	-4	A
I_{CM}	Collector Current-Peak	-6	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	36	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°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 = -30mA ; I _B = 0	-40			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _c = -4A ; I _B = -1A			-1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _c = -4A ; V _{CE} = -4V			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -60V ; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V ; I _C = 0			-100	μ A
h _{FE-1}	DC Current Gain	I _c = -0.3A ; V _{CE} = -4V	30		120	
h _{FE-2}	DC Current Gain	I _c = -4A ; V _{CE} = -4V	15			
f _T	Current-Gain—Bandwidth Product	I _c =-1A ; V _{CE} = -5V	3			MHz

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