

isc Silicon PNP Power Transistor

AD149

DESCRIPTION

- Wide Area of Safe Operation
- DC Current Gain-
: $h_{FE}=30-100@I_c = -1A$
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = -0.7V(Max)@ I_c = -3A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

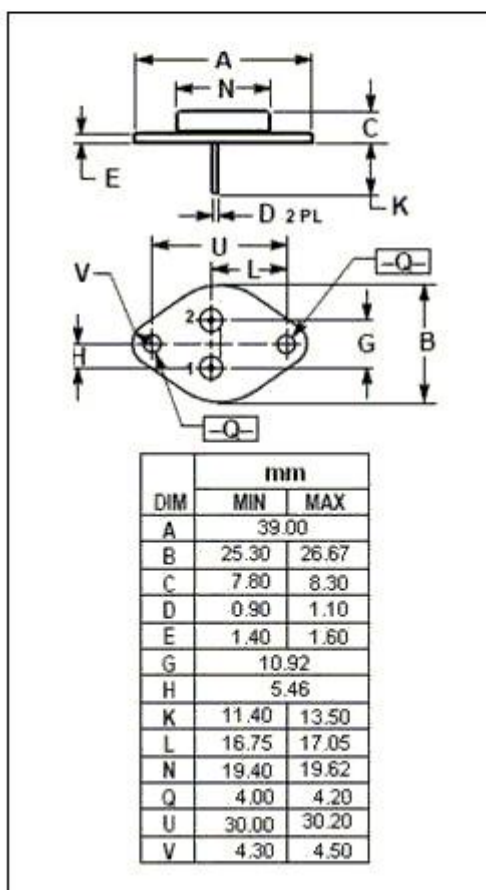
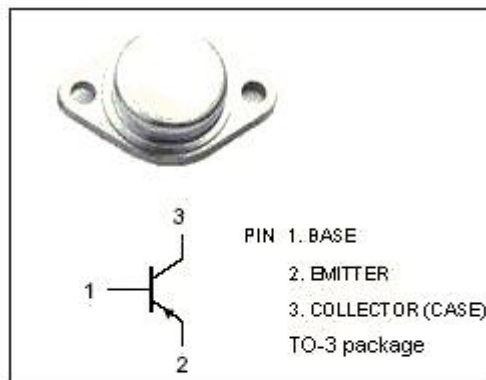
- Designed for general-purpose power switch and amplifier, consumer and industrial applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_c	Collector Current-Continuous	-3.5	A
P_c	Collector Power Dissipation @ $T_c=25^{\circ}C$	30	W
T_j	Junction Temperature	200	$^{\circ}C$
T_{stg}	Storage Temperature	-55~200	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{th-j-c}	Thermal Resistance, Junction to Case	1.52	$^{\circ}C/W$



isc Silicon PNP Power Transistor**AD149****ELECTRICAL CHARACTERISTICS**T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -100mA ; I _B = 0	-50		V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = -1mA ; I _E = 0	-50		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA ; I _C = 0	-6		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -0.3A		-0.7	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -3A; I _B = -0.3A		-1.2	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -50V; I _B = 0		-0.1	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = -50V; I _E = 0		-10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7.0V; I _C =0		-10	μ A
h _{FE}	DC Current Gain	I _C = -1A ; V _{CE} = -5V	30	150	