

isc Silicon PNP Power Transistor

2SB554

DESCRIPTION

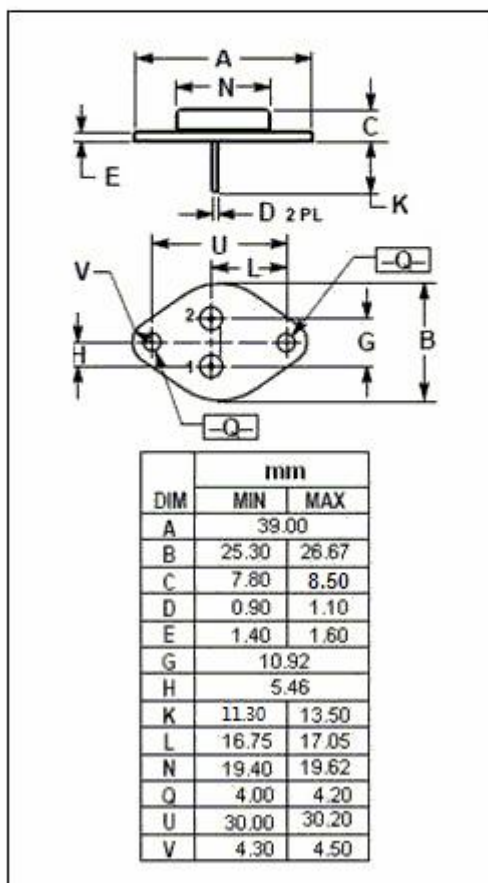
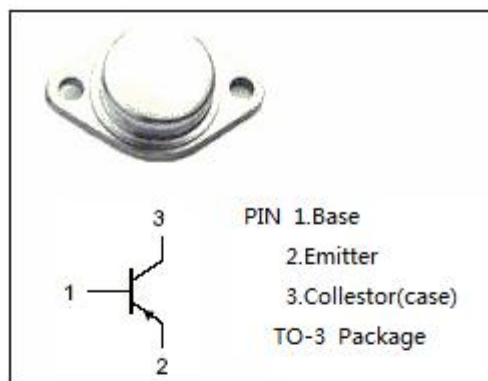
- High Power Dissipation-
: $P_C = 150W @ T_C = 25^{\circ}C$
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 180V (Min)$
- Complement to Type 2SD424
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplifier ,DC-DC converter and regulator applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-180	V
V_{CEO}	Collector-Emitter Voltage	-180	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-15	A
I_B	Base Current-Continuous	1.5	A
P_C	Collector Power Dissipation @ $T_C = 25^{\circ}C$	150	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$



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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=30\text{mA}$; $I_B=0$	-180			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}$; $I_C=0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=10\text{A}$; $I_B=1\text{A}$			-3.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=10\text{A}$; $V_{CE}=5\text{V}$			-2.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=90\text{V}$; $I_E=0$			-0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}$; $I_C=0$			-0.1	mA
h_{FE}	DC Current Gain	$I_C=2\text{A}$; $V_{CE}=5\text{V}$	40		140	
f_T	Current-Gain—Bandwidth Product	$I_C=2\text{A}$; $V_{CE}=5\text{V}$		5		MHz
C_{OB}	Output Capacitance	$I_E=0$; $V_{CB}=10\text{V}$; $f=1\text{MHz}$		300		pF

◆ h_{FE-2} Classifications

R	O
40-80	70-140

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