

isc Silicon PNP Power Transistor

2SB616

DESCRIPTION

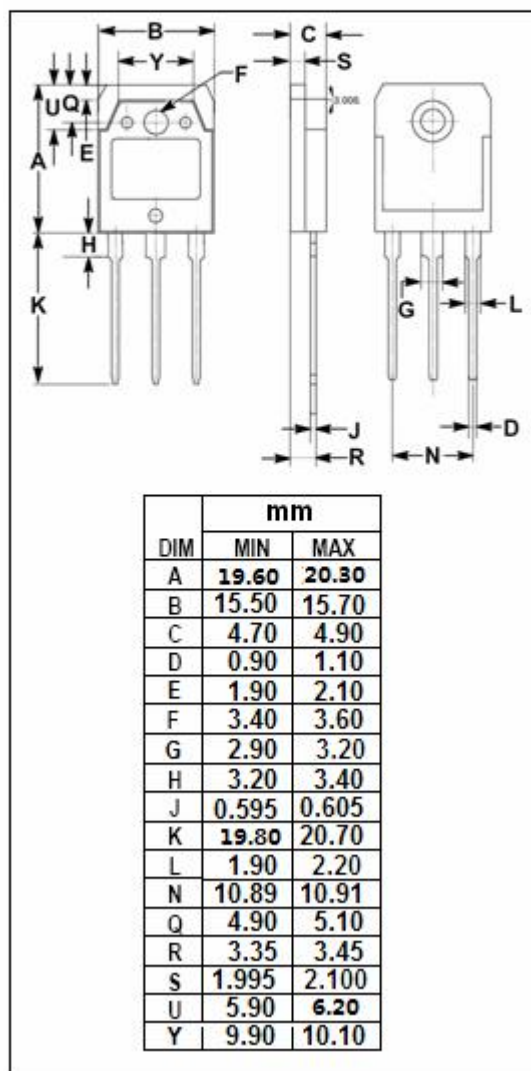
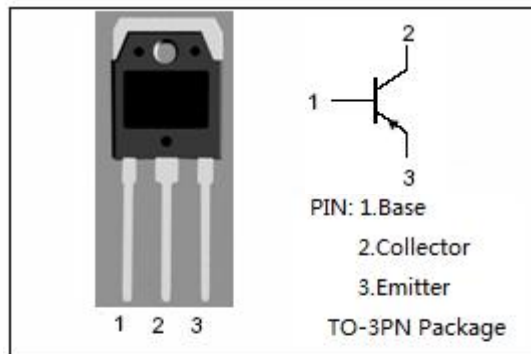
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -100V(\text{Min.})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.0(\text{Max.}) @ I_C = -2A$
- With TO-3PN package
- Complement to Type 2SD586
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for power amplifiers applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-5	A
P_C	Collector Power Dissipation@ $T_c=25^\circ\text{C}$	60	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -30mA$; $R_{BE} = \infty$	-100			V
$V_{(BR)CBO}$	Collector-Base breakdown voltage	$I_C = -1mA$; $I_E = 0$	-100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1mA$; $I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -3A$; $I_B = -0.3A$			-1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1A$; $V_{CE} = -5V$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -100V$; $I_E = 0$			-100	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5V$; $I_C = 0$			-100	μA
h_{FE}	DC Current Gain	$I_C = -1A$; $V_{CE} = -5V$	60			
f_T	Current-Gain—Bandwidth Product	$I_C = -1A$; $V_{CE} = -5V$		15		MHz
C_{OB}	Output Capacitance	$I_E = 0$; $V_{CB} = -10V$, $f_{test} = 1MHz$		140		pF

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