

**isc Silicon PNP Power Transistor**
**2SB1566**
**DESCRIPTION**

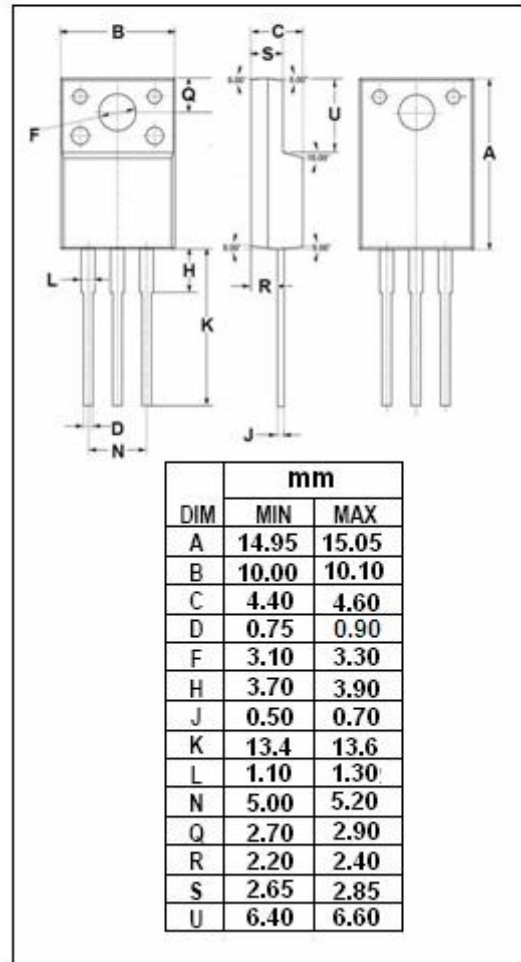
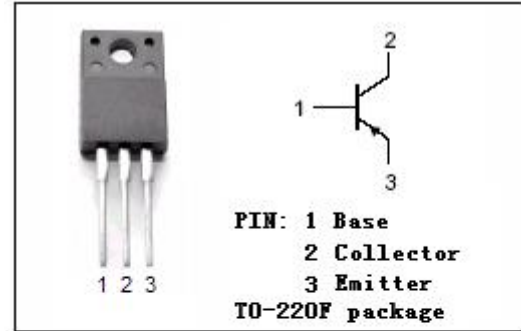
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -50V(\text{Min})$
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = -1.0V(\text{Max}) @ (I_C = -2A, I_B = -0.2A)$
- Wide Area of Safe Operation
- Complement to Type 2SD2395
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for power amplifications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-60	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-7	V
$I_C$	Collector Current-Continuous	-3	A
$I_{CM}$	Collector Current-Peak	-4.5	A
$P_C$	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	25	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



## isc Silicon PNP Power Transistor

2SB1566

## ELECTRICAL CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -1mA; I <sub>B</sub> = 0	-50			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = -50 μA; I <sub>E</sub> = 0	-60			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = -50 μA; I <sub>C</sub> = 0	-7			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A			-1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A			-1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -60V; I <sub>E</sub> = 0			-1	μA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -7V; I <sub>C</sub> = 0			-1	μA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -3V	100		320	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -5V; f <sub>test</sub> = 5MHz		60		MHz
C <sub>OB</sub>	Collector Output Capacitance	I <sub>E</sub> = 0; V <sub>CE</sub> = -10V; f <sub>test</sub> = 1MHz		40		pF

◆ h<sub>FE</sub> Classifications

E	F
100-200	160-320

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