

# isc Silicon PNP Power Transistor

# 2SB1065

#### **DESCRIPTION**

- • Low Collector Saturation Voltage
- :  $V_{CE(sat)}$ = -1.0V(Max)@I<sub>C</sub>= -2A
- · Wide Area of Safe Operation
- Complement to Type 2SD1506
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



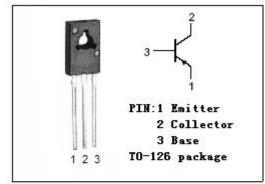
### **APPLICATIONS**

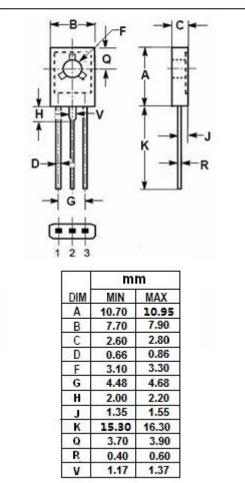
• Designed for low frequency power amplifier applications.



## ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
$V_{CBO}$	Collector-Base Voltage	-60	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	-50	V	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V	
lc	Collector Current-Continuous	А		
Icp	Collector Current-Pulse	-4.5	А	
Pc	Collector Power Dissipation @ Tc=25°C	10	W	
	Collector Power Dissipation @ Ta=25°C	1.2		
TJ	Junction Temperature	150	°C	
T <sub>stg</sub>	Storage Temperature Range -55~1		°C	







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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ 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
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage I <sub>C</sub> = -50 μ A; I <sub>E</sub> = 0		-60			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage I <sub>E</sub> = -50 μ A; I <sub>C</sub> = 0		-5			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
Ісво	Collector Cutoff Current	V <sub>CB</sub> = -40V; I <sub>E</sub> = 0			-1.0	μА
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -4V; I <sub>C</sub> = 0			-1.0	μ <b>А</b>
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -3V	56		390	
fτ	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -5V		70		MHz
Сов	Output Capacitance	I <sub>E</sub> =0; V <sub>CB</sub> = -10V, f <sub>test</sub> = 1MHz		50		pF

#### ♦ h<sub>FE</sub> Classifications

N	Р	Q	R
56-120	82-180	120-270	180-390

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