

isc Silicon PNP Power Transistor

2SB565

DESCRIPTION

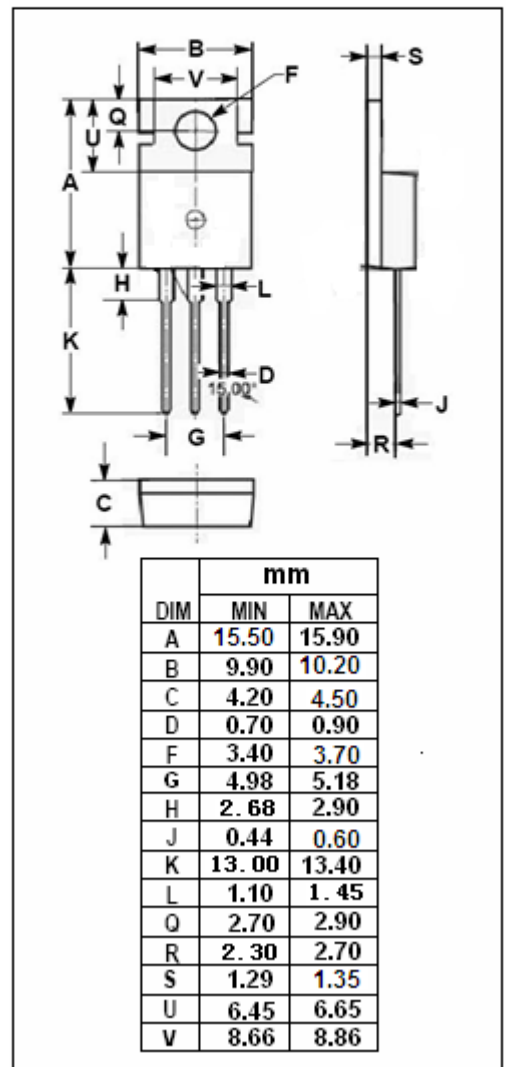
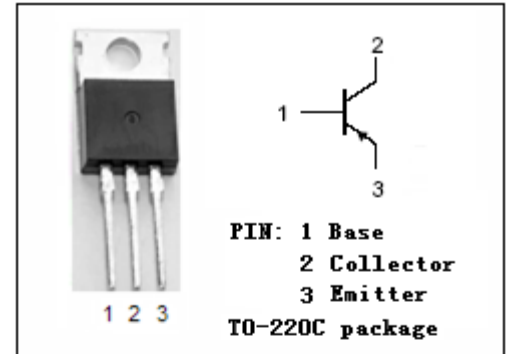
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.0(V)(Max) @ I_C = -2A$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -50V(Min)$

APPLICATIONS

- Designed for low frequency power amplifier and power switching 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	-4	V
I_C	Collector Current-Continuous	-4	A
I_{CM}	Collector Current-Peak	-8	A
P_C	Total Power Dissipation @ $T_C=25^{\circ}C$	40	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon PNP Power Transistor**2SB565****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	$I_C = -30\text{mA}; R_{BE} = \infty$	-50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -10\mu\text{A}; I_E = 0$	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -10\mu\text{A}; I_C = 0$	-4			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-1.2	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -50\text{V}; I_E = 0$			-1	μA
h_{FE-1}	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -4\text{V}$	60		200	
h_{FE-2}	DC Current Gain	$I_C = -0.1\text{A}; V_{CE} = -4\text{V}$	35			
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -4\text{V}$		15		MHz

Switching Times

t_{on}	Turn-on Time	$V_{CC} = -10.5\text{V}, I_{B1} = -I_{B2} = -50\text{mA}, I_C = -0.5\text{A}$		0.3		μs
t_{stg}	Storage Time			2.5		μs
t_{off}	Turn-off Time			3.0		μs

◆ h_{FE-1} Classifications

B	C
60-120	100-200