

isc Silicon PNP Power Transistor

2SB896

DESCRIPTION

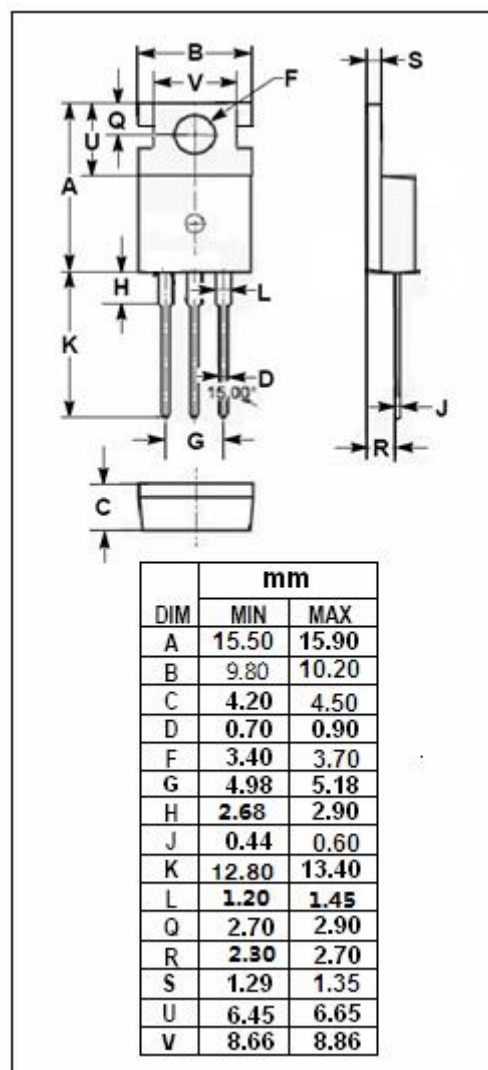
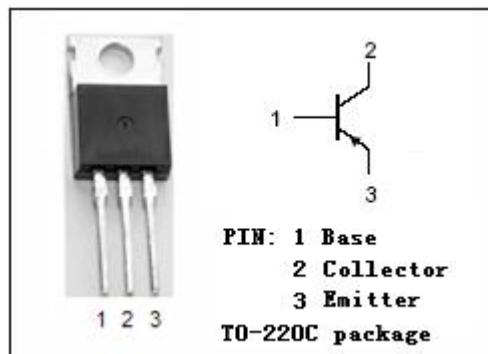
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -40V(\text{Min.})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -0.6(\text{Max.}) @ I_C = -7A$
- High speed switching
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low voltage switching applications .

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Peak	-15	A
P_C	Collector Power Dissipation@ $T_c=25^{\circ}C$	35	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-55~150	$^{\circ}C$



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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	$I_C = -10mA$; $R_{BE} = \infty$	-40			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1mA$; $I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -7A$; $I_B = -0.23A$			-0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -7A$; $I_B = -0.23A$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -40V$; $I_E = 0$			-50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5V$; $I_C = 0$			-10	μA
h_{FE1}	DC Current Gain	$I_C = -0.1A$; $V_{CE} = -2V$	45			
h_{FE2}	DC Current Gain	$I_C = -2A$; $V_{CE} = -2V$	60		260	
C_{OB}	Output Capacitance	$I_E = 0$; $V_{CB} = -10V$; $f = 1MHz$		200		pF

Switching Times

t_{on}	Turn-on Time	$I_C = -2A$; $I_{B1} = -I_{B2} = -66mA$,			0.5	μs
t_{stg}	Storage Time				1.0	μs
t_f	Fall Time				0.5	μs

 h_{FE-2} Classifications

R	Q	P
60-120	90-180	130-260

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