

isc Silicon PNP Power Transistor

2SB649

DESCRIPTION

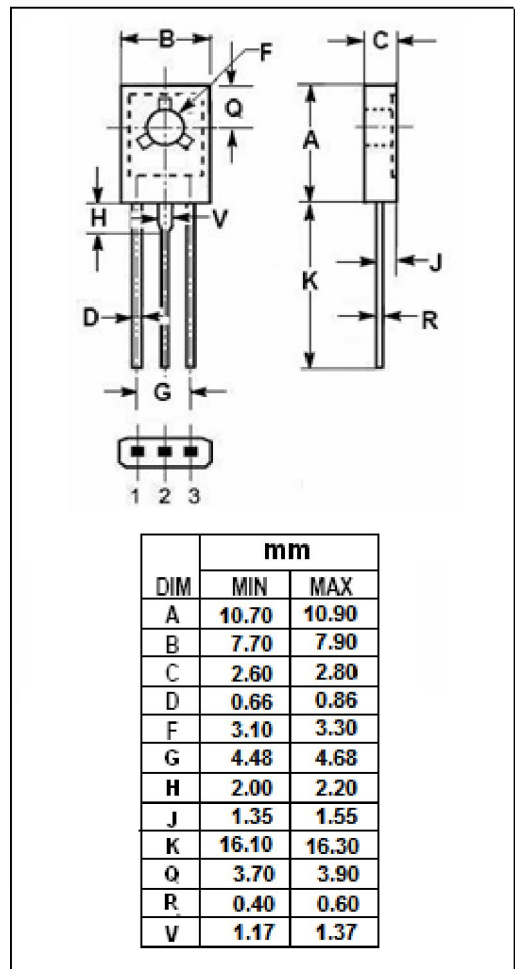
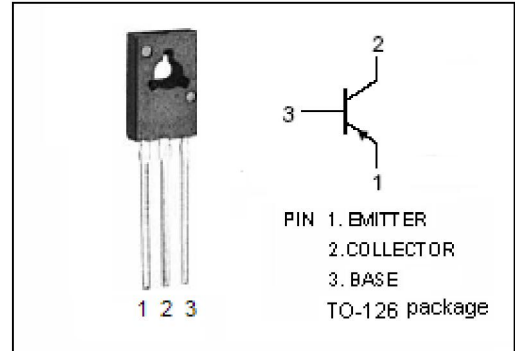
- High Collector Current- $I_C=-1.5A$
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO}=-120V(\text{Min})$
- Good Linearity of h_{FE}
- Low Saturation Voltage
- Complement to Type 2SD669

APPLICATIONS

- Power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1.5	A
I_{CP}	Collector Current-Pulse	-3	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	20	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SB649****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -1\text{mA}; I_E = 0$	-180			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; R_{BE} = \infty$	-120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}; I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -150\text{mA}; V_{CE} = -5\text{V}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -160\text{V}; I_E = 0$			-10	μA
h_{FE-1}	DC Current Gain	$I_C = -150\text{mA}; V_{CE} = -5\text{V}$	60		320	
h_{FE-2}	DC Current Gain	$I_C = -500\text{mA}; V_{CE} = -5\text{V}$	30			
f_T	Current-Gain—Bandwidth Product	$I_C = -150\text{mA}; V_{CE} = -5\text{V}$		140		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}, f_{test} = 1\text{MHz}$		27		pF

◆ **h_{FE-1} Classifications**

B	C	D
60-120	100-200	160-320