

**isc Silicon PNP Power Transistor**

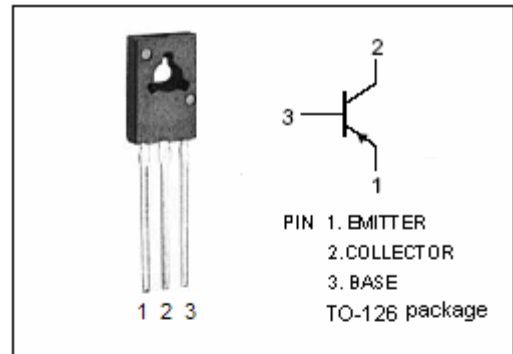
**2SB1353**

**DESCRIPTION**

- Good Linearity of  $h_{FE}$
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -120V(\text{Min})$
- Complement to Type 2SD2033

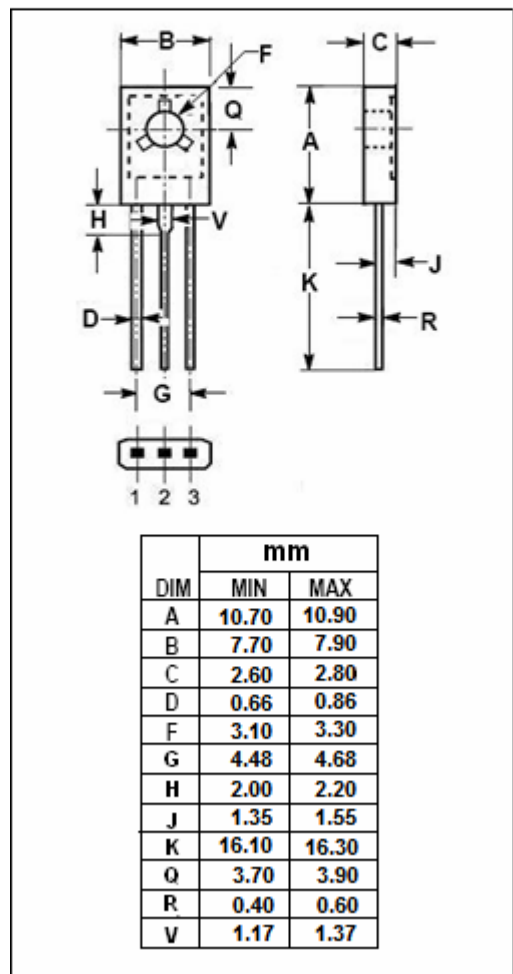
**APPLICATIONS**

- Designed for use in high voltage driver applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-120	V
$V_{CEO}$	Collector-Emitter Voltage	-120	V
$V_{EBO}$	Emitter-Base Voltage	-5.0	V
$I_C$	Collector Current-Continuous	-1.5	A
$P_C$	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.8	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	20	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



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2SB1353

## 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	$I_C = -0.1\text{mA}; I_E = 0$	-120			V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; I_B = 0$	-120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -0.1\text{mA}; I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}; I_B = -0.1\text{A}$			-2.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -120\text{V}; I_E = 0$			-10	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-10	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C = -0.1\text{A}; V_{CE} = -5\text{V}$	60		320	
$f_T$	Current-Gain—Bandwidth Product	$I_C = -0.1\text{A}; V_{CE} = -5\text{V}$		50		MHz

◆  $h_{FE}$  Classifications

D	E	F
60-120	100-200	160-320