

isc Silicon PNP Power Transistor

2SB1370

DESCRIPTION

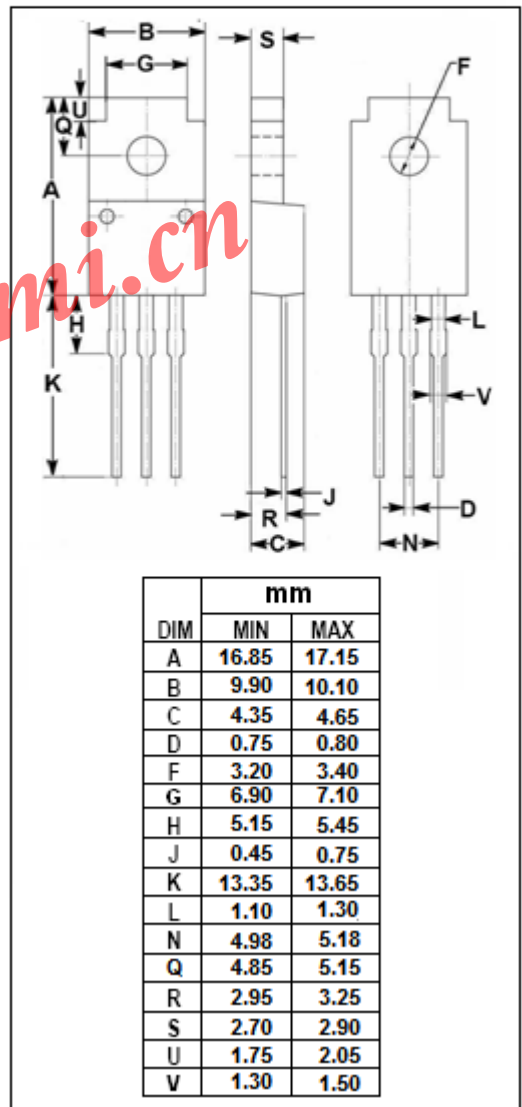
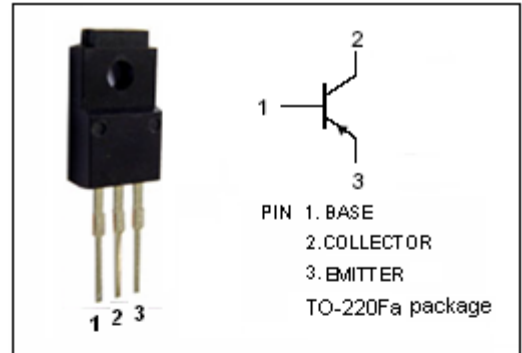
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = -0.3V(Typ.) @ I_C = -2A$
- Good Linearity of  $h_{FE}$
- Wide Area of Safe Operation

APPLICATIONS

- Designed for power switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-60	V
$V_{CEO}$	Collector-Emmitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-3	A
$I_{CM}$	Collector Current-Peak	-6	A
$P_C$	Collector Power Dissipation @ $T_a=25^{\circ}C$	2	W
	Collector Power Dissipation @ $T_C=25^{\circ}C$	30	
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



## isc Silicon PNP Power Transistor

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## 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	$I_C = -1\text{mA}; I_B = 0$	-60			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -50\ \mu\text{A}; I_E = 0$	-60			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -50\ \mu\text{A}; I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -60\text{V}; I_E = 0$			-10	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$			-10	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C = -0.5\text{A}; V_{CE} = -5\text{V}$	100		320	
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f_{test} = 1\text{MHz}$		80		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -5\text{V}; f_{test} = 5\text{MHz}$		15		MHz

◆  $h_{FE}$  Classifications

E	F
100-200	160-320