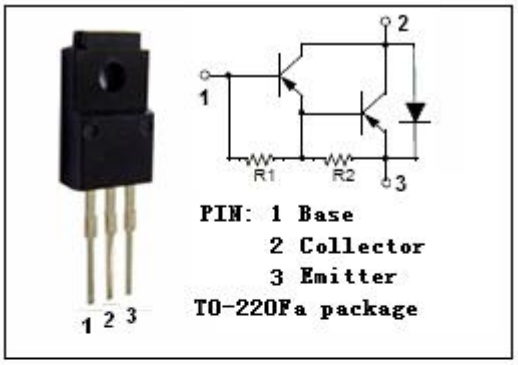
isc Silicon PNP Darlington Power Transistor 2SB1391

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= -120V(Min)
- High DC Current Gain-
  : h_{FE}= 1000(Min)@ (V_{CE}= -3V, I_C= -4A)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

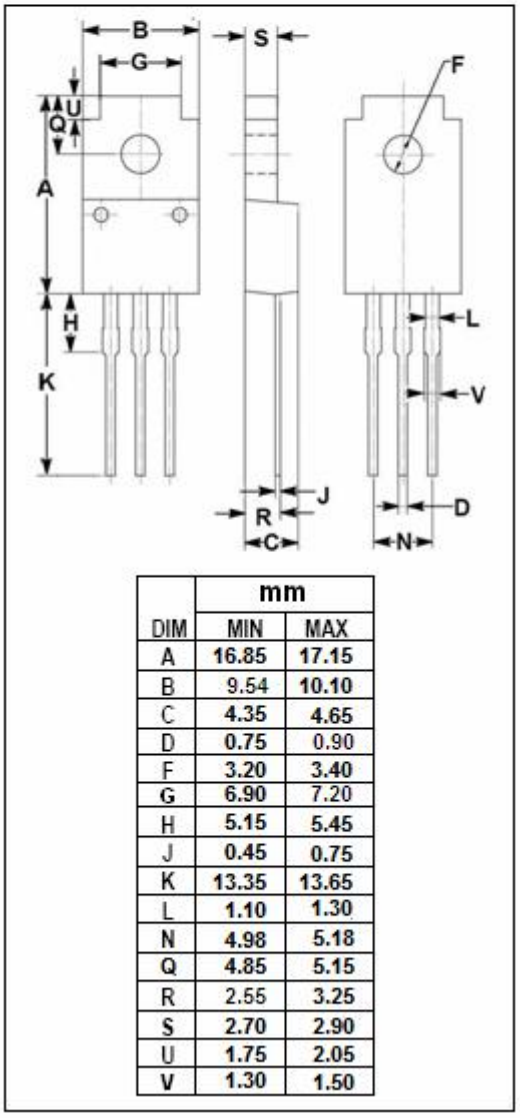


APPLICATIONS

- Designed for power switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-8	A
I_{CM}	Collector Current-Peak	-12	A
P_C	Collector Power Dissipation @T_a=25℃	2	W
	Collector Power Dissipation @T_C=25℃	25	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃



DIM	mm MIN	mm MAX
A	16.85	17.15
B	9.54	10.10
C	4.35	4.65
D	0.75	0.90
F	3.20	3.40
G	6.90	7.20
H	5.15	5.45
J	0.45	0.75
K	13.35	13.65
L	1.10	1.30
N	4.98	5.18
Q	4.85	5.15
R	2.55	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= -25mA; I_B= 0	-120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -5mA; I_C= 0	-7			V
$V_{(BR)CBO}$	Collector-Base breakdown voltage	I_C=-0.1mA; I_E= 0	-120			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= -4A; I_B= -8mA			-1.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= -8A; I_B= -80mA			-3.0	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= -4A; I_B= -8mA			-2.0	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= -8A; I_B= -80mA			-3.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -100V; I_E= 0			-10	μA
I_{CEO}	Collector Cutoff Current	V_{CE}= -100V; I_B= 0			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -7V; I_C= 0			-5	mA
h_{FE}	DC Current Gain	I_C= -4A; V_{CE}= -3V	1000		20000	