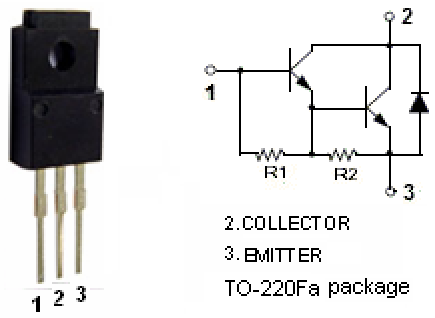
isc Silicon NPN Darlington Power Transistor 2SD2110



DESCRIPTION

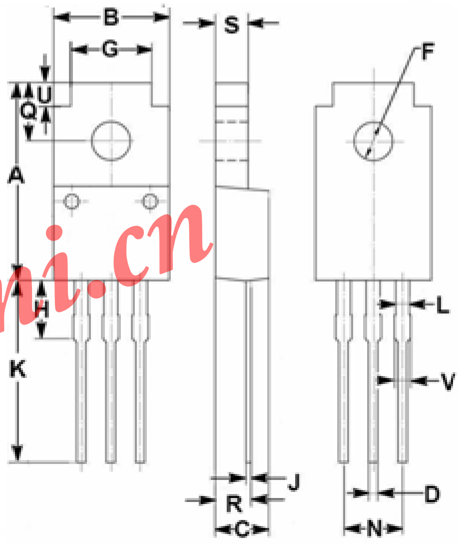
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 80V(Min)
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 1.5V(Max) @I_C= 2A
- High DC Current Gain
  : h_{FE}= 1000(Min) @ I_C= 2A, V_{CE}= 3V

APPLICATIONS

- Designed for low frequency power amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	8	A
P_C	Collector Power Dissipation @ T_C=25℃	25	W
	Collector Power Dissipation @ T_a=25℃	2	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	16.85	17.15
B	9.90	10.10
C	4.35	4.65
D	0.75	0.80
F	3.20	3.40
G	6.90	7.10
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	2.95	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 25mA ; R_{BE}= ∞	80			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= 0.1mA; I_E= 0	80			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 50mA; I_C= 0	7			V
$V_{CE(sat)\text{-}1}$	Collector-Emitter Saturation Voltage	I_C= 2A; I_B= 4mA			1.5	V
$V_{CE(sat)\text{-}2}$	Collector-Emitter Saturation Voltage	I_C= 4A; I_B= 40mA			3.0	V
$V_{BE(sat)\text{-}1}$	Base-Emitter Saturation Voltage	I_C= 2A; I_B= 4mA			2.0	V
$V_{BE(sat)\text{-}2}$	Base-Emitter Saturation Voltage	I_C= 4A; I_B= 40mA			3.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 65V; I_E= 0			10	μ A
I_{CEO}	Collector Cutoff Current	V_{CE}= 65V; R_{BE}= ∞			10	μ A
h_{FE}	DC Current Gain	I_C= 2A; V_{CE}= 3V	1000		20000	
V_{ECF}	C-E Diode Forward Voltage	I_F= 4A			3.0	V