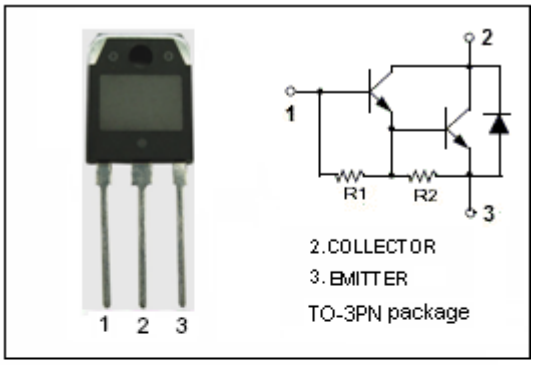
isc Silicon NPN Darlington Power Transistor 2SD1662



DESCRIPTION

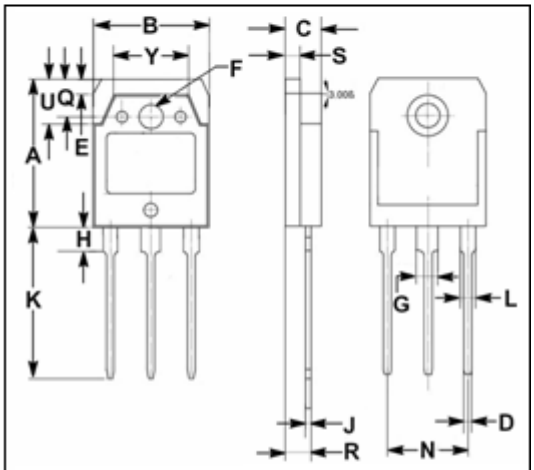
- High DC Current Gain
  : h_{FE}= 1000(Min.)@ I_C= 15A
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$ = 100V(Min.)
- Low Collector Saturation Voltage
  : $V_{CE(sat)}$ = 1.5V(Max.)@ I_C= 15A

APPLICATIONS

- Designed for high current switching application.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	15	A
I_B	Base Current- Continuous	1	A
P_C	Collector Power Dissipation @T_C=25℃	100	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	MAX
A	19.90	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

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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= 50mA, I_B= 0	100			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 15A ,I_B= 25mA			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 15A ,I_B= 25mA			2.2	V
I_{CBO}	Collector Cutoff current	V_{CB}= 100V, I_E= 0			100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			10	mA
h_{FE}	DC Current Gain	I_C= 15A; V_{CE}= 3V	1000			
C_{OB}	Output Capacitance	I_E= 0;V_{CB}= 10V;f_{test}= 1.0MHz		280		pF
f_T	Current-Gain—Bandwidth Product	I_C= 1A; V_{CE}= 5V		14		MHz
Switching Times						
t_{on}	Turn-On Time	I_{B1} = -I_{B2}= 10mA; R_L= 10Ω; V_{CC}= 50V		1.0		μs
t_{stg}	Storage Time			2.0		μs
t_f	Fall Time			1.5		μs