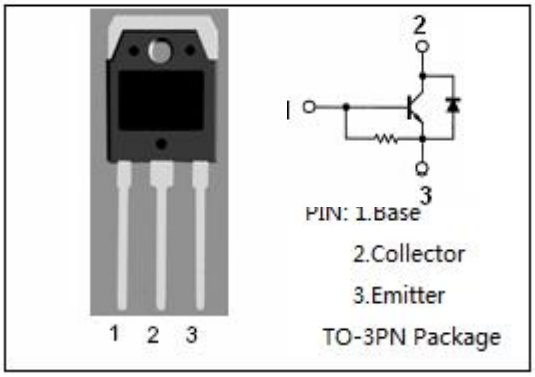
isc Silicon NPN Power Transistor — 2SD1727



DESCRIPTION

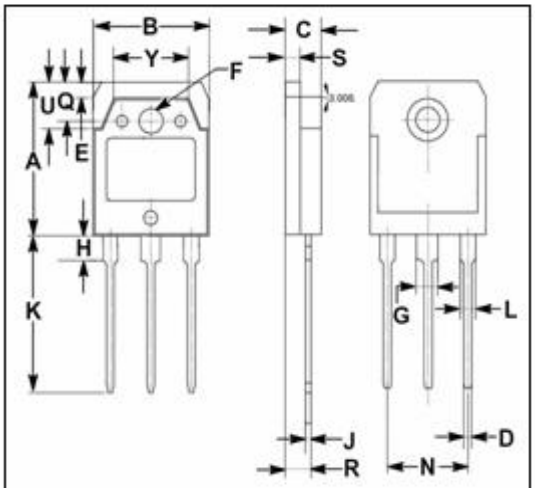
- High Voltage
- High Switching Speed
- Built-in damper diode
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for horizontal deflection output applications.

ABSOLUTE MAXIMUM RATINGS (T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CES}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	1.5	A
I_{CP}	Collector Current-Peak	5	A
I_B	Base Current- Continuous	0.6	A
P_C	Collector Power Dissipation @T_C=25℃	60	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55-150	℃



DIM	mm MIN	MAX
A	19.60	20.30
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	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 200mA; I_C= 0	7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1A; I_B= 0.4A			8.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 1A; I_B= 0.4A			1.5	V
h_{FE}	DC Current Gain	I_C= 0.5A; V_{CE}= 5V	5		25	
I_{CBO}	Collector Cutoff Current	V_{CB}= 750V; I_E= 0			10	μA
		V_{CB}= 1500V; I_E= 0			1.0	mA
V_{ECF}	C-E Diode Forward Voltage	I_F= 1.5A			1.5	V
f_T	Transition Frequency	I_C= 0.5A; V_{CE}= 10V		2		MHz
Switching Times, Resistive Load						
t_s	Storage Time	I_C= 1A; I_{B1}= 0.3A; I_{B2}= 0.6A, V_{CC}= 200V		1.0		μs
t_f	Fall Time			0.2		μs

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