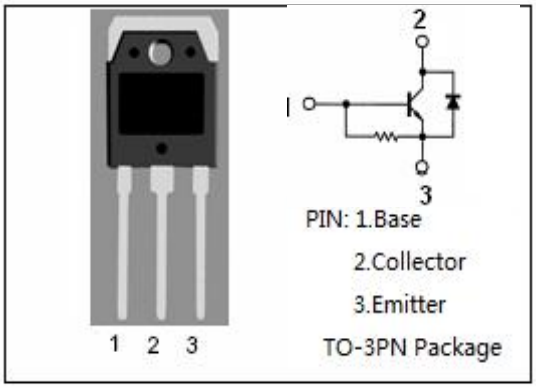
isc Silicon NPN Power Transistor — 2SD1440

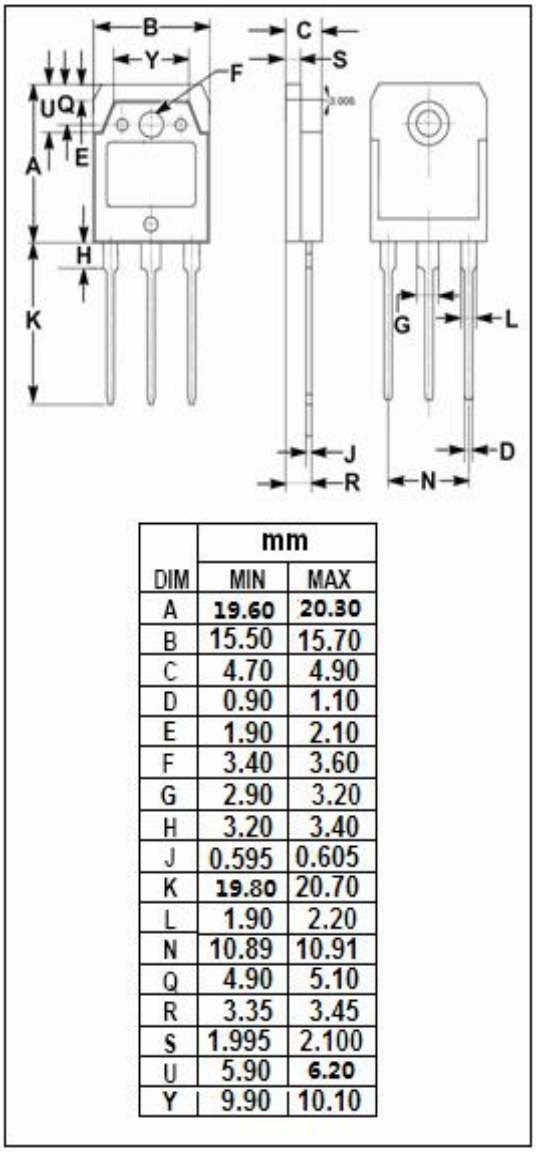
DESCRIPTION

- High Breakdown Voltage-
  : V_{CBO}= 1500V (Min)
- High Switching Speed
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for horizontal deflection output applications.





DIM	mm MIN	mm 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

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_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current- Continuous	3.5	A
I_{CP}	Collector Current-Peak	13	A
I_{BP}	Base Current-Peak	3.5	A
P_C	Collector Power Dissipation @ T_a= 25℃	2.5	W
	Collector Power Dissipation @ T_C= 25℃	65	
T_J	Junction Temperature	130	℃
T_{stg}	Storage Temperature Range	-55~130	℃

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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	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 2.5A; I_B= 0.8A			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 2.5A; I_B= 0.8A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 750V; I_E= 0 V_{CB}= 1500V; I_E= 0			50 1.0	μA mA
h_{FE}	DC Current Gain	I_C= 2.5A; V_{CE}= 10V	4		15	
f_T	Current-Gain—Bandwidth Product	I_C= 0.5A; V_{CE}= 10V		2		MHz
V_{ECF}	C-E Diode Forward Voltage	I_F= 4A			2.2	V
t_s	Storage Time	I_C= 2.5A, I_{Bend}= 0.8A, L_{leak}= 5 μH			9.0	μs
t_f	Fall Time				0.8	μs

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