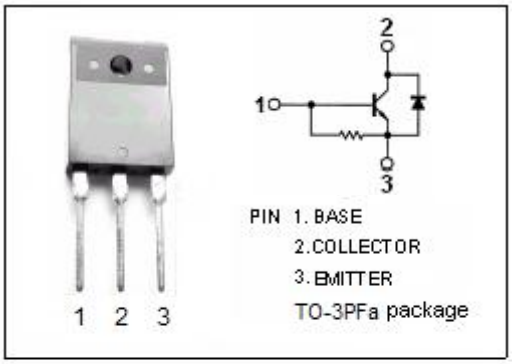
isc Silicon NPN Power Transistor — 2SD1847

DESCRIPTION

- Collector-Base Breakdown Voltage-
  : V_{CBO}= 1300V (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

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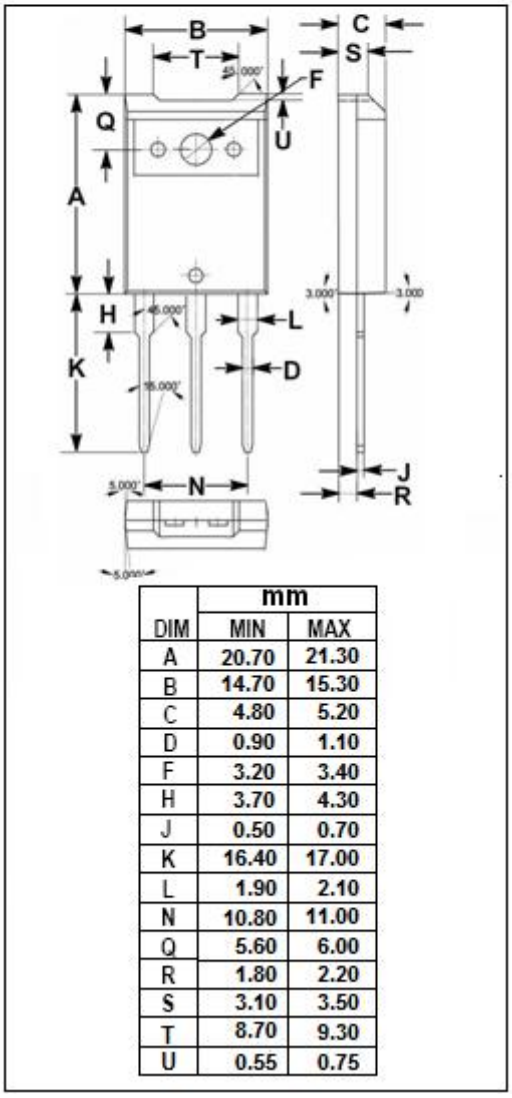

DIM	mm MIN	MAX
A	20.70	21.30
B	14.70	15.30
C	4.80	5.20
D	0.90	1.10
F	3.20	3.40
H	3.70	4.30
J	0.50	0.70
K	16.40	17.00
L	1.90	2.10
N	10.80	11.00
Q	5.60	6.00
R	1.80	2.20
S	3.10	3.50
T	8.70	9.30
U	0.55	0.75

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector- Base Voltage	1300	V
V_{CES}	Collector-Emitter Voltage	1300	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	15	A
I_B	Base Current- Continuous	2	A
P_C	Collector Power Dissipation @ T_a=25℃	3	W
	Collector Power Dissipation @ T_C=25℃	100	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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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= 4A; I_B= 1A			8.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 4A; I_B= 1A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 750V; I_E= 0 V_{CB}= 1300V; I_E= 0			10 1.0	μA mA
h_{FE-1}	DC Current Gain	I_C= 1A; V_{CE}= 5V	5		25	
h_{FE-2}	DC Current Gain	I_C= 4A; V_{CE}= 10V	4			
f_T	Current-Gain—Bandwidth Product	I_C= 1A; V_{CE}= 10V		2		MHz
V_{ECF}	C-E Diode Forward Voltage	I_F= 5A			2.3	V
Switching times, Resistive Load						
t_{stg}	Storage Time	I_C= 4A; I_{B1}= 1A; I_{B2}= -2A; V_{CC}= 200V		1.5		μs
t_f	Fall Time			0.2		μs

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