

isc Silicon NPN Power Transistor

2SD1845

DESCRIPTION

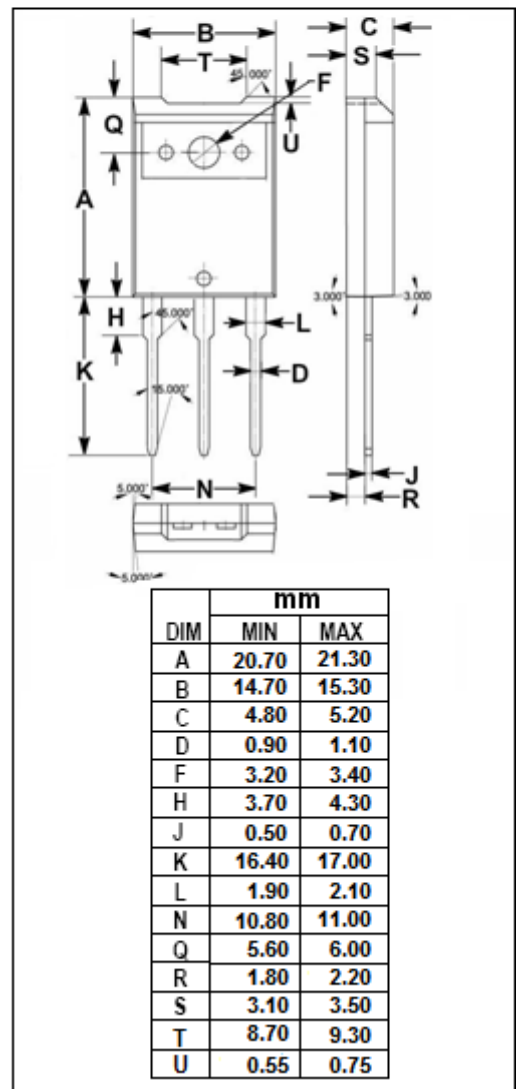
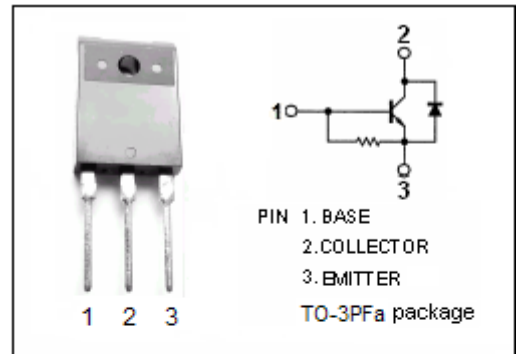
- Collector-Base Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min.)
- High Switching Speed
- Built-in Damper Diode

APPLICATIONS

- Designed for horizontal deflection output applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector- Base Voltage	1500	V
V_{CES}	Collector-Emitter Voltage	1500	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	2.5	A
I_{CM}	Collector Current-Peak	7	A
I_B	Base Current- Continuous	1.5	A
P_C	Collector Power Dissipation @ $T_a=25^{\circ}C$	3	W
	Collector Power Dissipation @ $T_c=25^{\circ}C$	60	
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**2SD1845****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=500\text{mA}; I_C=0$	7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=0.6\text{A}$			8.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=0.6\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=750\text{V}; I_E=0$ $V_{CB}=1500\text{V}; I_E=0$			10 1.0	μA mA
h_{FE-1}	DC Current Gain	$I_C=0.5\text{A}; V_{CE}=5\text{V}$	5		25	
h_{FE-2}	DC Current Gain	$I_C=2\text{A}; V_{CE}=10\text{V}$	3.5			
f_T	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=10\text{V}$		2		MHz
V_{ECF}	C-E Diode Forward Voltage	$I_F=2.5\text{A}$			2.0	V

Switching times, Resistive Load

t_{stg}	Storage Time	$I_C=2\text{A}; I_{B1}=0.6\text{A}; I_{B2}=-1.2\text{A};$ $V_{CC}=200\text{V}$		1.5		μs
t_f	Fall Time			0.2		μs