

isc Silicon NPN Power Transistor

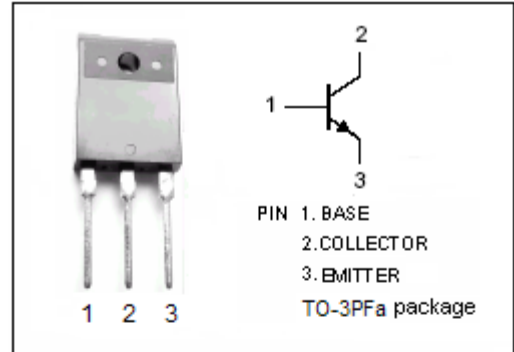
2SD1576

DESCRIPTION

- High Collector-Base Breakdown Voltage-
: $V_{(BR)CBO} = 1500V$ (Min.)
- High Switching Speed
- Wide Area of Safe Operation

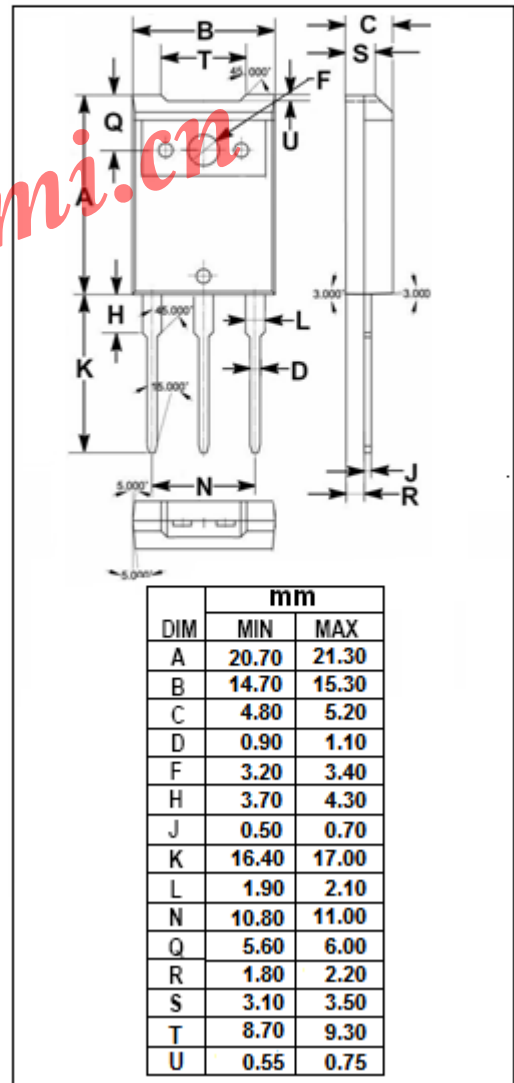
APPLICATIONS

- 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_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	2	A
I_{CM}	Collector Current-Peak	6	A
I_{BM}	Base Current-Peak	2.5	A
P_C	Collector Power Dissipation @ $T_a=25^{\circ}C$	2.5	W
	Collector Power Dissipation @ $T_c=25^{\circ}C$	80	
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**2SD1576****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=1\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=1\text{A}$			1.5	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	6			V
I_{CBO}	Collector Cutoff Current	$V_{CB}=750\text{V}; I_E=0$ $V_{CB}=1500\text{V}; I_E=0$			50 1.0	μA mA
h_{FE}	DC Current Gain	$I_C=2\text{A}; V_{CE}=5\text{V}$	2			
f_T	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=10\text{V}; f_{test}=0.5\text{MHz}$		2		MHz

Switching times

t_{stg}	Storage Time	$I_C=2.5\text{A}; I_B=1.1\text{A}; L_B=10\mu\text{H}$			9.0	μs
t_f	Fall Time				1.0	μs