

**isc Silicon NPN Power Transistor**

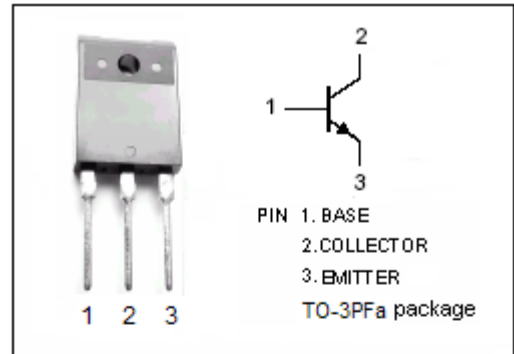
**2SD1576**

**DESCRIPTION**

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

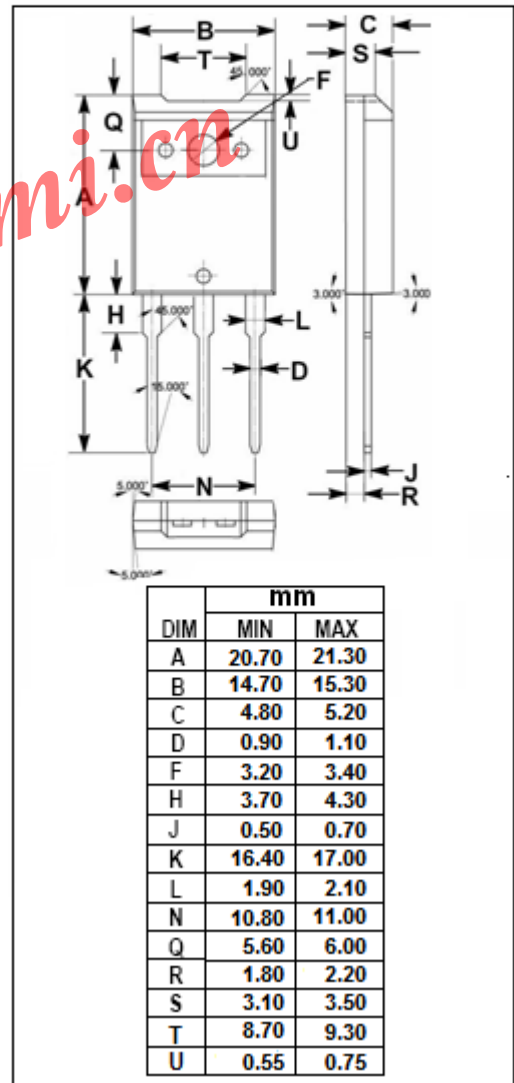
**APPLICATIONS**

- 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	$^\circ C$



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**ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 1A			5.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2A; I <sub>B</sub> = 1A			1.5	V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA; I <sub>C</sub> = 0	6			V
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>CB</sub> = 750V; I <sub>E</sub> = 0 V <sub>CB</sub> = 1500V; I <sub>E</sub> = 0			50 1.0	μ A mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 2A; V <sub>CE</sub> = 5V	2			
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 10V; f <sub>test</sub> = 0.5MHz		2		MHz

Switching times

t <sub>stg</sub>	Storage Time	I <sub>C</sub> = 2.5A , I <sub>B</sub> = 1.1A; L <sub>B</sub> = 10 μ H			9.0	μ s
t <sub>f</sub>	Fall Time				1.0	μ s