

**isc Silicon NPN Power Transistor**
**2SD1575**
**DESCRIPTION**

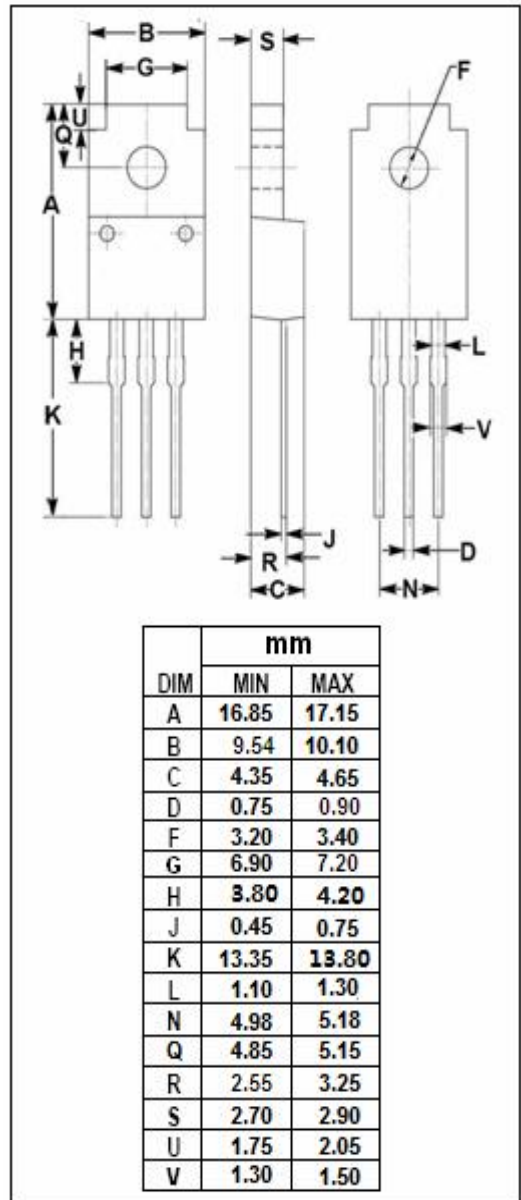
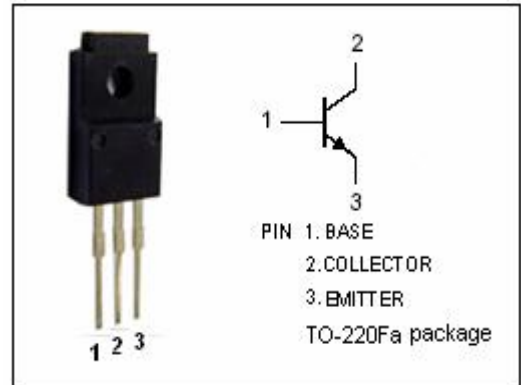
- High Breakdown Voltage-  
:  $V_{CBO} = 1200V$  (Min)
- High Switching Speed
- High Reliability
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for horizontal deflection output applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1200	V
$V_{CES}$	Collector-Emitter Voltage	1200	V
$V_{CEO}$	Collector-Emitter Voltage	700	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current- Continuous	2	A
$I_{CP}$	Collector Current-Peak	6	A
$I_{BP}$	Base Current-Peak	2.5	A
$I_{BP}$	Reverse Base Current-Peak	1.5	A
$P_C$	Collector Power Dissipation @ $T_c = 25^\circ C$	40	W
$T_J$	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>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 1mA ; I <sub>C</sub> = 0	6			V
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
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 750V ; I <sub>E</sub> = 0			50	μ A
		V <sub>CB</sub> = 1200V ; I <sub>E</sub> = 0			1.0	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 6V ; I <sub>C</sub> = 0			50	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 2A; V <sub>CE</sub> = 5V	2			
Switching times						
t <sub>stg</sub>	Storage Time	I <sub>C</sub> = 2.5A; I <sub>B1(end)</sub> = 1.1A; L <sub>B</sub> = 10 μ H			9	μ s
t <sub>f</sub>	Fall Time				1.0	μ s

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