

# isc Silicon NPN Power Transistor

## 2SD1734

### DESCRIPTION

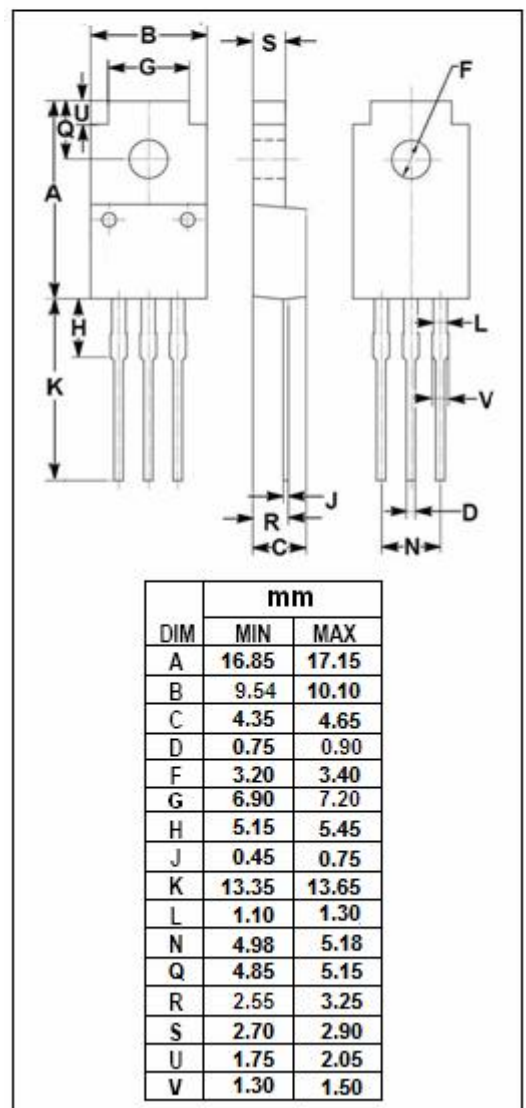
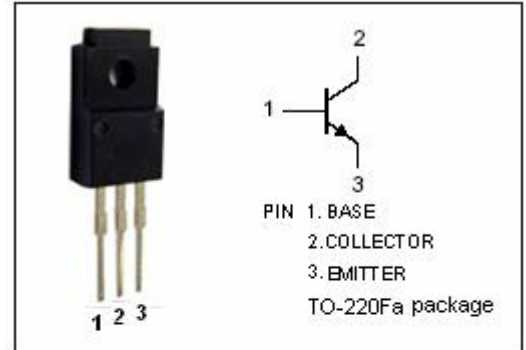
- High Voltage
- High Switching Speed
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Designed for horizontal deflection output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	1300	V
$V_{CES}$	Collector-Emitter Voltage	1300	V
$V_{CEO}$	Collector-Emitter Voltage	700	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current-Continuous	1.5	A
$I_{CP}$	Collector Current-Peak	5	A
$I_B$	Base Current- Continuous	0.6	A
$P_C$	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	40	W
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55-150	$^{\circ}\text{C}$



**isc Silicon NPN Power Transistor****2SD1734****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	7			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1A; I <sub>B</sub> = 0.4A			8.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 1A; I <sub>B</sub> = 0.4A			1.5	V
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 5V	6		30	
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 750V; I <sub>E</sub> = 0			10	μ A
		V <sub>CB</sub> = 1300V; I <sub>E</sub> = 0			1.0	mA
f <sub>T</sub>	Transition Frequency	I <sub>C</sub> = 0.5A; V <sub>CE</sub> = 10V		2		MHz

**Switching Times, Resistive Load**

t <sub>s</sub>	Storage Time	I <sub>C</sub> = 1A; I <sub>B1</sub> = 0.3A; I <sub>B2</sub> = 0.6A, V <sub>CC</sub> = 200V		1.0		μ s
t <sub>f</sub>	Fall Time			0.2		μ s

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