

**SPTECH Silicon NPN Power Transistor**

**2SC2334**

**DESCRIPTION**

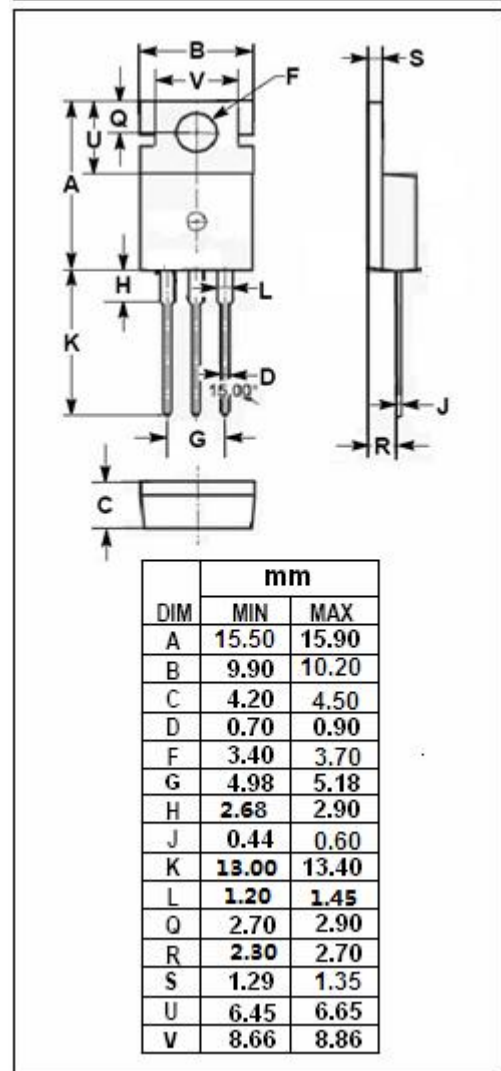
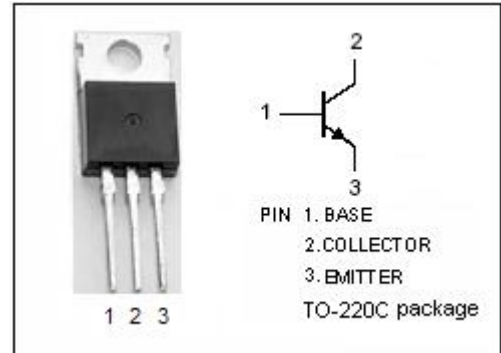
- Low Collector Saturation Voltage
- Fast Switching Speed
- Complement to Type 2SA1010

**APPLICATIONS**

- Developed for high-voltage high-speed switching, and is ideal for use as a driver in devices such as switching regulators, DC/DC converters, and high frequency power amplifiers.

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	150	V
V <sub>CEO</sub>	Collector-Emitter Voltage	100	V
V <sub>EBO</sub>	Emitter-Base Voltage	7.0	V
I <sub>C</sub>	Collector Current-Continuous	7.0	A
I <sub>CM</sub>	Collector Current-Peak	15	A
I <sub>B</sub>	Base Current-Continuous	3.5	A
P <sub>C</sub>	Collector Power Dissipation @ T <sub>a</sub> =25°C	1.5	W
	Total Power Dissipation @ T <sub>C</sub> =25°C	40	
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



**ELECTRICAL CHARACTERISTICS**

$T_c=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 50\text{mA}$ ; $I_B= 0$	100		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5.0\text{A}$ ; $I_B= 0.5\text{A}$		0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5.0\text{A}$ ; $I_B= 0.5\text{A}$		1.5	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}= 100\text{V}$ ; $I_E= 0$		10	$\mu\text{A}$
$I_{CER}$	Collector Cutoff Current	$V_{CE}= 100\text{V}$ ; $R_{BE}= 51\ \Omega$ , $T_a=125^{\circ}\text{C}$		1.0	mA
$I_{CEX}$	Collector Cutoff Current	$V_{CE}= 100\text{V}$ ; $V_{BE(off)}= -1.5\text{V}$ $V_{CE}= 100\text{V}$ ; $V_{BE(off)}= -1.5\text{V}$ , $T_a=125^{\circ}\text{C}$		10 1.0	$\mu\text{A}$ mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 5\text{V}$ ; $I_C= 0$		10	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C= 0.5\text{A}$ ; $V_{CE}= 5\text{V}$	40		
$h_{FE-2}$	DC Current Gain	$I_C= 3.0\text{A}$ ; $V_{CE}= 5\text{V}$	40	200	
$h_{FE-3}$	DC Current Gain	$I_C= 5.0\text{A}$ ; $V_{CE}= 5\text{V}$	20		

Switching times

$t_{on}$	Turn-on Time	$I_C= 5.0\text{A}$ , $R_L= 10\ \Omega$ , $I_{B1}= -I_{B2}= 0.5\text{A}$ , $V_{CC}\approx 50\text{V}$		0.5	$\mu\text{s}$
$t_{stg}$	Storage Time			1.5	$\mu\text{s}$
$t_f$	Fall Time			0.5	$\mu\text{s}$

◆  **$h_{FE-2}$  Classifications**

M	L	K
40-80	60-120	100-200

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bipolar Transistors - BJT category](#):*

*Click to view products by [SPTECH manufacturer](#):*

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)  
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)  
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)  
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)  
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)  
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)