

SPTECH Silicon NPN Power Transistor

MJE15030

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 150V(\text{Min})$
- High Current Gain-Bandwidth Product-
: $f_T = 30\text{MHz}(\text{Min}) @ I_C = 0.5A$
- DC current gain -
: $h_{FE} = 40 (\text{Min}) @ I_C = 3.0 A$
: $h_{FE} = 20 (\text{Min}) @ I_C = 4.0 A$
- Complement to Type MJE15031

APPLICATIONS

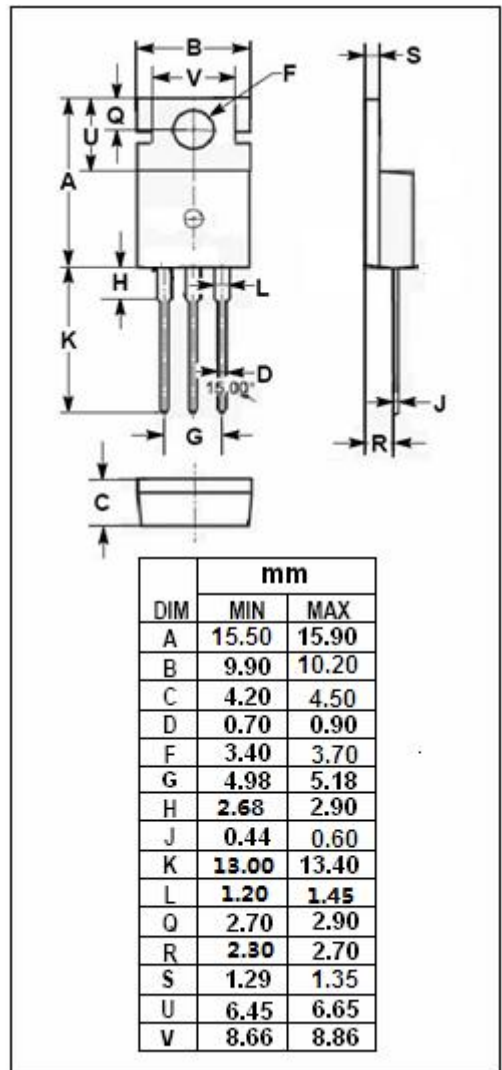
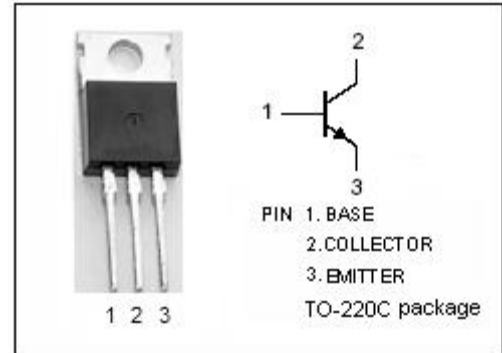
- Designed for use as high-frequency drivers in audio amplifiers.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	8	A
I_{CM}	Collector Current-Peak	16	A
I_B	Base Current	2	A
P_C	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	50	
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ\text{C/W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ\text{C/W}$



ELECTRICAL CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 10mA ; I _B = 0	150		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 1A ; I _B = 0.1A		0.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 1A ; V _{CE} = 2V		1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 150V; I _E = 0		10	μ A
I _{CEO}	Collector Cutoff Current	V _{CE} = 150V; I _B = 0		0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		10	μ A
h _{FE-1}	DC Current Gain	I _C = 0.1A ; V _{CE} = 2V	40		
h _{FE-2}	DC Current Gain	I _C = 2A ; V _{CE} = 2V	40		
h _{FE-3}	DC Current Gain	I _C = 3A ; V _{CE} = 2V	40		
h _{FE-4}	DC Current Gain	I _C = 4A ; V _{CE} = 2V	20		
f _T	Current Gain-Bandwidth Product	I _C = 0.5A; V _{CE} = 10V; f _{test} = 10MHZ	20		MHz

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](#)