2SB817C

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Bipolar Transistor -140V, -12A, Low VCE(sat) PNP TO-3P-3L

Features

- · Large current capacitance
- · Wide SOA and high durability against breakdown
- · Adoption of MBIT process

Specifications

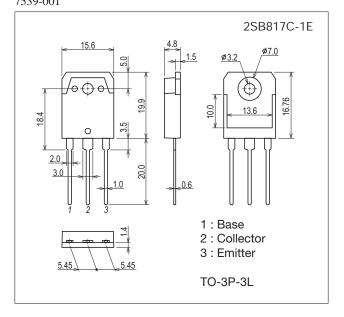
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector to Base Voltage	VCBO		-160	V
Collector to Emitter Voltage	VCEO		-140	V
Emitter to Base Voltage	V _{EBO}		-6	V
Collector Current	IC		-12	Α
Collector Current (Pulse)	ICP		-20	А
Collector Dissipation	Do		2.5	W
	PC	Tc=25°C	120	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit : mm (typ) 7539-001



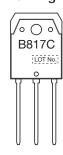
Product & Package Information

• Package : TO-3P-3L

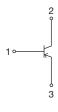
• JEITA, JEDEC : SC-65, TO-247, SOT-199

• Minimum Packing Quantity: 30 pcs./tube

Marking



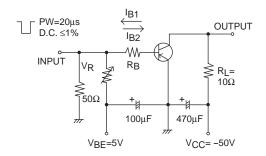
Electrical Connection



Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
		Conditions	min	typ	max	Unit
Collector Cutoff Current	ICBO	V _{CB} =-160V, I _E =0A			-0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =-4V, I _C =0A			-0.1	mA
DC Current Gain	hFE1	V _{CE} =-5V, I _C =-1A	100		200	
	h _{FE} 2	V _{CE} =-5V, I _C =-5A	35			
Gain-Bandwidth Product	fŢ	V _{CE} =-5V, I _C =-1A		10		MHz
Output Capacitance	Cob	V _{CB} =-10V, f=1MHz		280		pF
Base to Emitter Voltage	VBE	V _{CE} =-5V, I _C =-5A			-1.5	V
Collector to Emitter Saturation Voltage	V _{CE} (sat)	I _C =-5A, I _B =-0.5A		-0.3	-2.0	V
Collector to Base Breakdown Voltage	V(BR)CBO	IC=-5mA, IE=0A -160				V
Collector to Emitter Breakdown Voltage	V(BR)CEO	IC=-50mA, RBE=∞	-140			V
Emitter to Base Breakdown Voltage	V(BR)EBO	I _E =-5mA, I _C =0A	-6			V
Turn-ON Time	ton			0.45		μS
Storage Time	t _{stg}	See specified Test Circuit.		1.75		μS
Fall Time	tf			0.25		μs

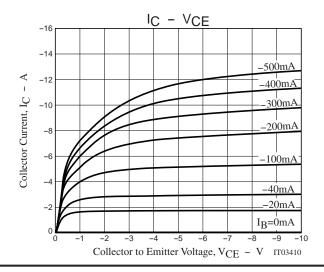
Switching Time Test Circuit

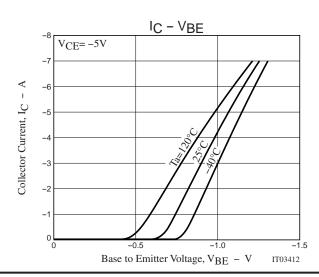


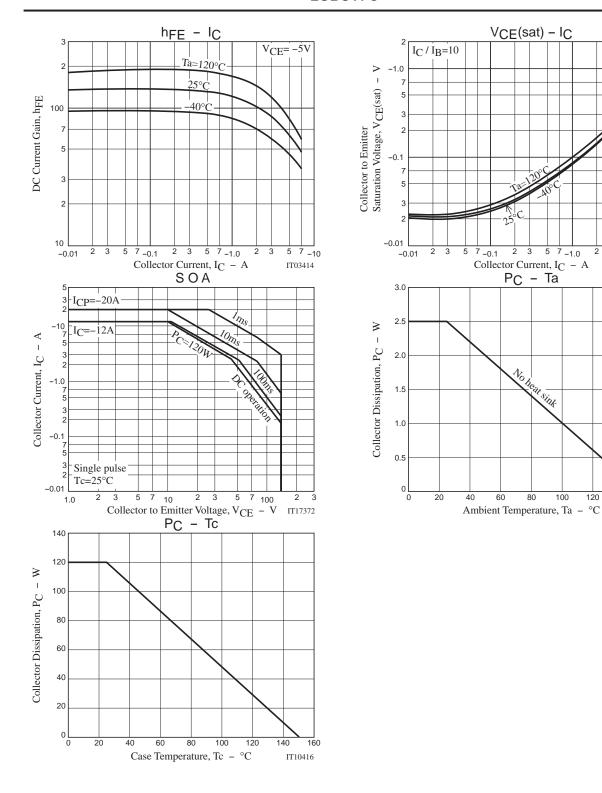
 $I_{C} = -10I_{B1} = 10I_{B2} = -5A$

Ordering Information

Device	Package	Shipping	memo	
2SB817C-1E	TO-3P-3L	30pcs./tube	Pb-Free	







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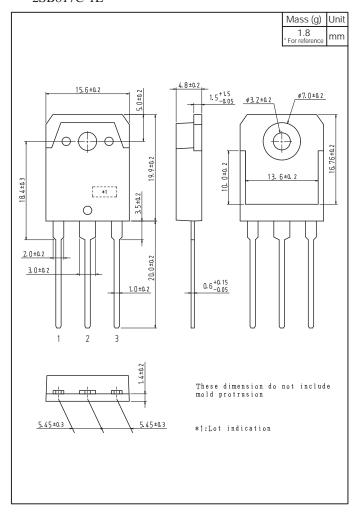
160

IT03419

140

Outline Drawing

2SB817C-1E



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