PNP/NPN Epitaxial Planar Silicon Transistors



2SB1467/2SD2218

General High-Current Switching Applications

Applications

· Relay drivers, high-speed inverters, converters.

Features

- · Micaless package facilitating mounting.
- · Low collector-to-emitter saturation voltage: $V_{CE(sat)} = -0.5V$ (PNP), 0.4V (NPN) max.
- · Large current capacity.

(): 2SB1467

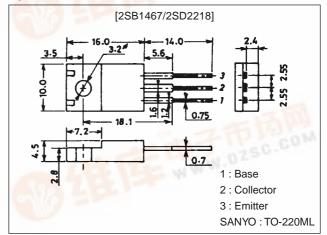
Specifications

Absolute Maximum Ratings at Ta = 25°C

Package Dimensions

unit:mm

2041A



Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		(-)60	V
Collector-to-Emitter Voltage	VCEO		(-)30	V
Emitter-to-Base Voltage	V _{EBO}	pal .	(-)6	V
Collector Current	l _C	- CF	(–)8	А
Collector Current (Pulse)	ICP	1 A. D. C. C. C.	(–)15	А
Collector Dissipation	PC	AND AND LOSS W	2	W
		Tc=25°C	20	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg	D. C.	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)40V, I _E =0			(-)0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0			(-)0.1	mA
DC Current Gain	h _{FE} 1*	V _{CE} =(-)2V, I _C =(-)1A	70*		280*	
	h _{FE} 2	V _{CE} =(-)2V, I _C =(-)4A	30		40.	
Gain-Bandwidth Product	fT	V _{CE} =(-)5V, I _C =(-)1A		120		MHz
Collector-to-Emitter Saturation Voltage	VCE(sat)	I _C =(-)3A, I _B =(-)0.15A			(-0.5)	V
					0.4	V

*: The 2SB1467/2SD2218 are classified by 1A h_{FE} as follows:

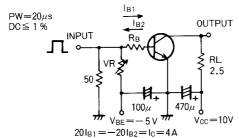
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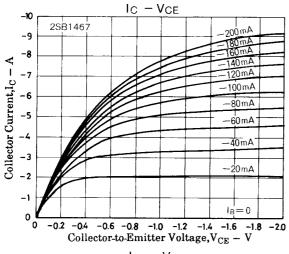
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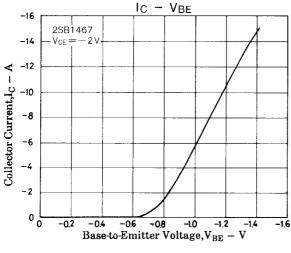
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	O III
Collector-to-Base Breakdown Voltage	V _(BR) CBO	I _C =(-)1mA, I _E =0	(-)60			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =(–)1mA, R _{BE} =∞	(-)30			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =(-)1mA, I _C =0	(–)6			V
Turn-ON Time	ton	See specified test circuit.		0.1		μs
Storage Time	t _{stg}	See specified test circuit.		(0.2)		μs
				0.5		μs
Fall Time	t _f	See specified test circuit.		0.03		μs

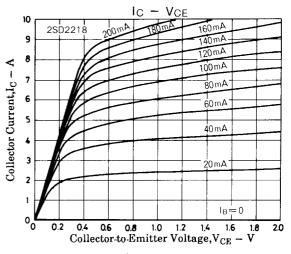
Switching Time Test Circuit

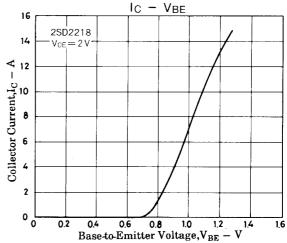


Unit (resistance : Ω , capacitance : F)

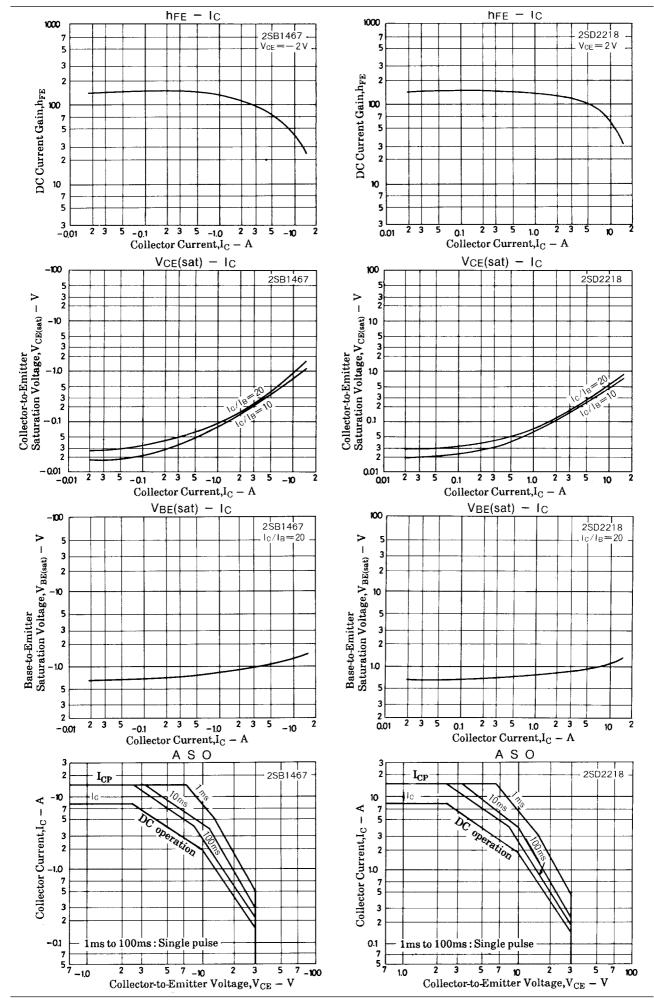




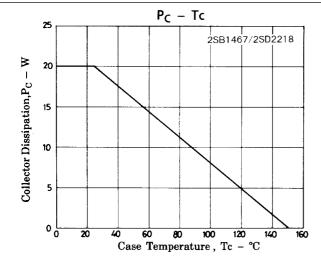


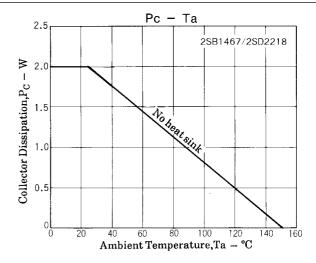


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