



SANYO Semiconductors

DATA SHEET

2SA2221/2SC6141

PNP Epitaxial Planar Silicon Transistor
 NPN Triple Diffused Planar Silicon Transistor
230V / 15A, AF100W
Output Applications

Applications

- 230V / 15A, AF100W output applications.

Features

- Large current capacitance.
- Wide ASO and high durability against breakdown.
- Adoption of MBIT process.

Specifications () : 2SA2221

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		(-)250	V
Collector-to-Emitter Voltage	V _{CEO}		(-)230	V
Emitter-to-Base Voltage	V _{EB0}		(-)6	V
Collector Current	I _C		(-)15	A
Collector Current (Pulse)	I _{CP}		(-)30	A
Collector Dissipation	P _C		3.5	W
		T _c =25°C	170	W
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

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2SA2221/2SC6141

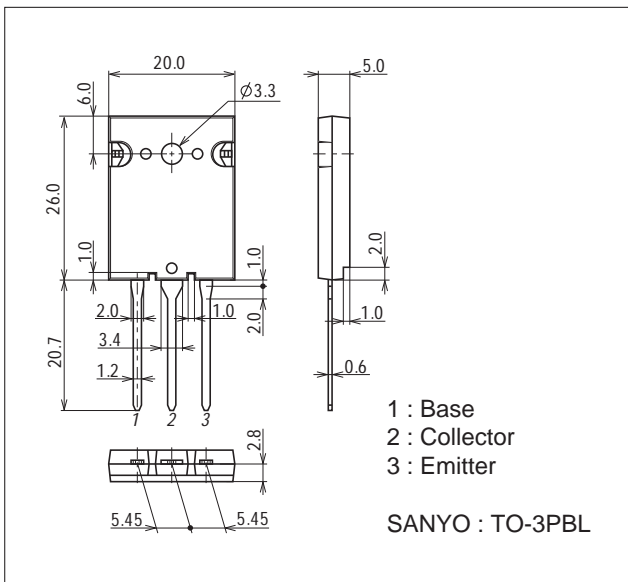
www.DataSheet4U.com Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	ICBO	V _{CB} =(-)250V, I _E =0A			(-)0.1	mA
Emitter Cutoff Current	IEBO	V _{EB} =(-)4V, I _C =0A			(-)0.1	mA
DC Current Gain	h _{FE1}	V _{CE} =(-)5V, I _C =(-)1A	60		160	
	h _{FE2}	V _{CE} =(-)5V, I _C =(-)7.5A	35			
Gain-Bandwidth Product	f _T	V _{CE} =(-)5V, I _C =(-)1A		(10)15		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)10V, f=1MHz		(400)200		pF
Base-to-Emitter Voltage	V _{BE}	V _{CE} =(-)5V, I _C =(-)7.5A			(-)1.5	V
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)7.5A, I _B =(-)0.75A		(-0.3)0.2	(-)2.0	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)5mA, I _E =0A	(-)250			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =(-)50mA, R _{BE} =∞	(-)230			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =(-)5mA, I _C =0A	(-)6			V
Turn-On Time	t _{on}	See specified Test Circuit.		(0.45)0.56		μs
Storage Time	t _{stg}	See specified Test Circuit.		(1.75)3.3		μs
Fall Time	t _f	See specified Test Circuit.		(0.25)0.4		μs

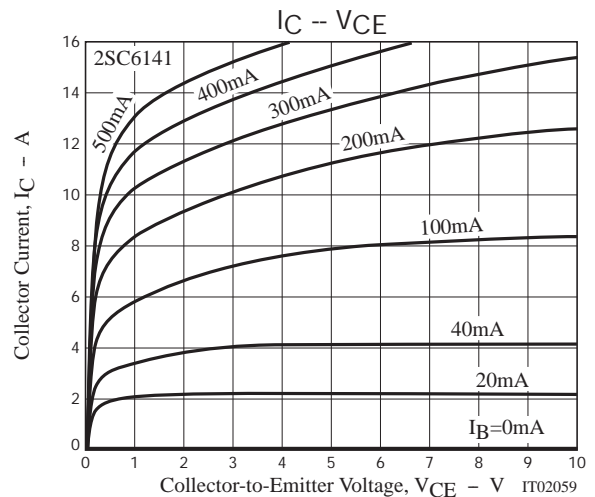
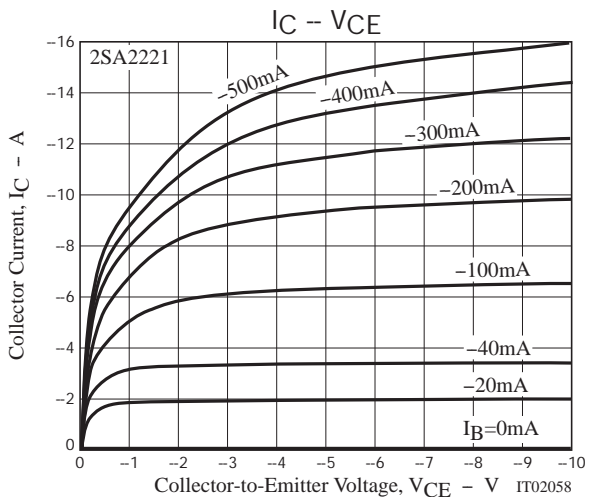
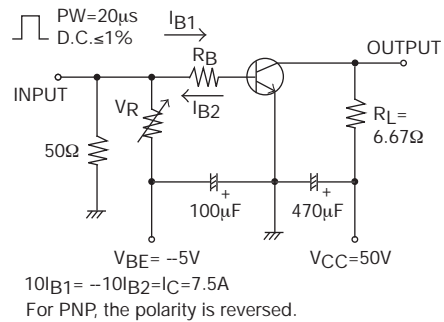
Package Dimensions

unit : mm (typ)

7502-001

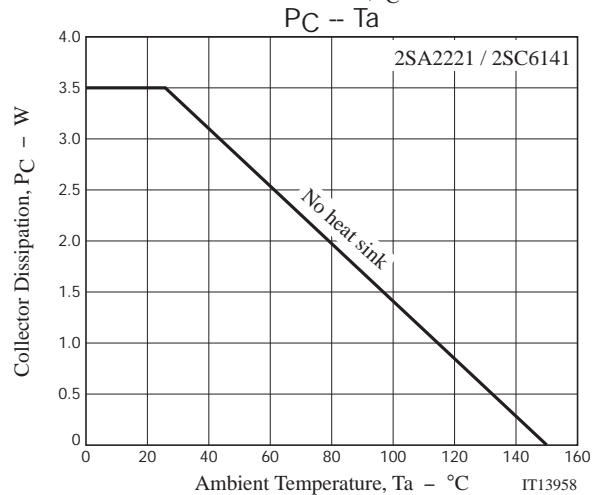
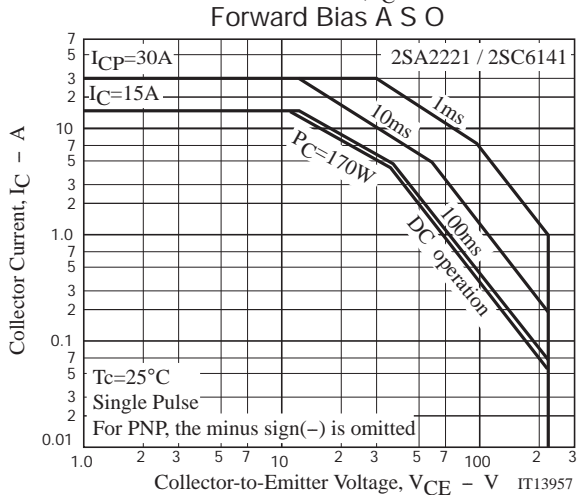
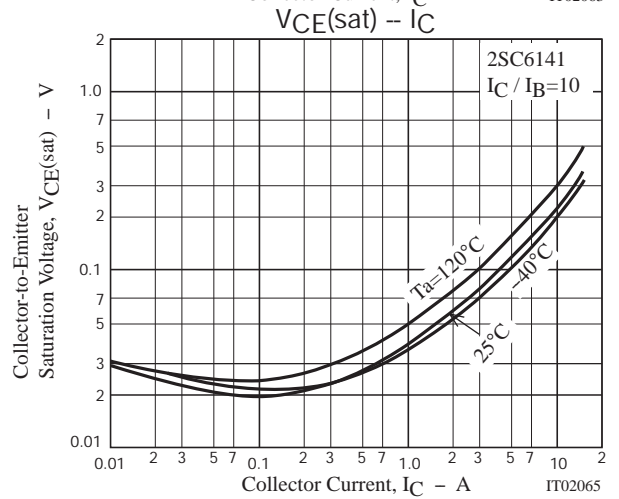
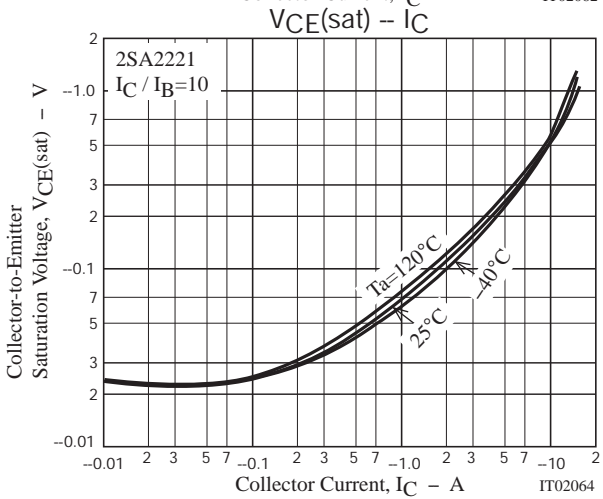
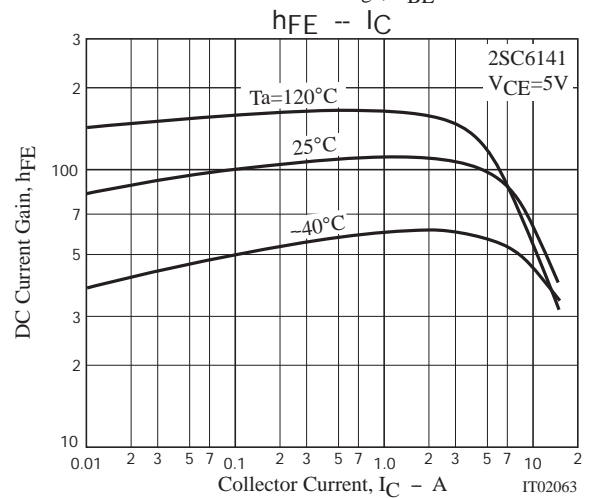
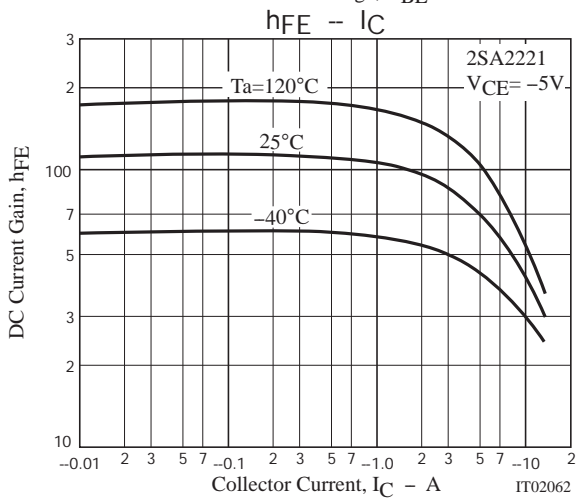
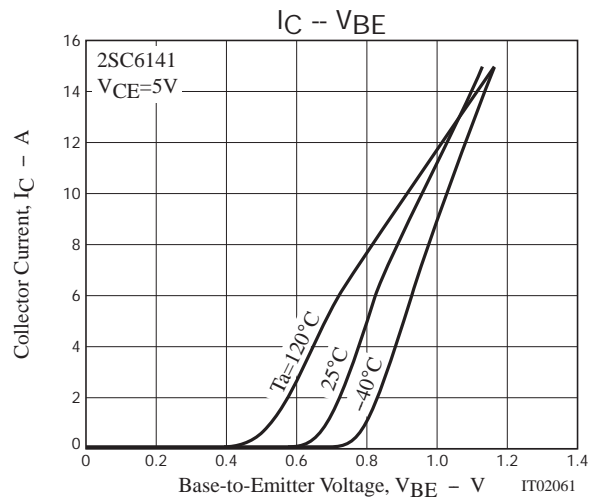
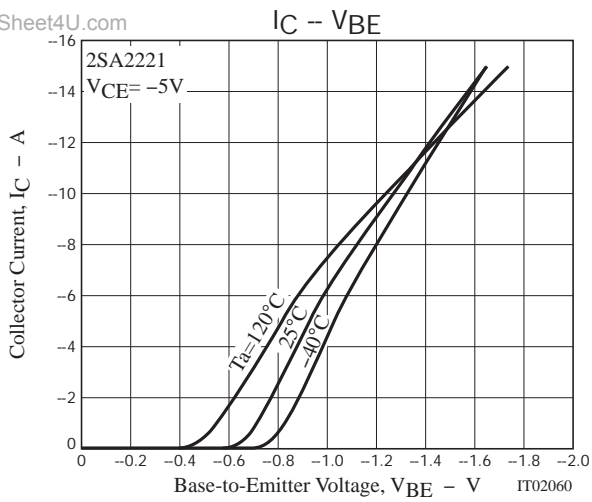


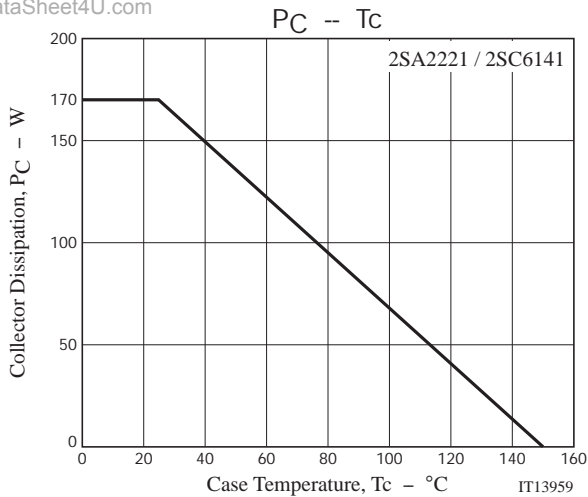
Switching Time Test Circuit



2SA2221/2SC6141

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