

Ordering number : ENA0995



SANYO Semiconductors

DATA SHEET

2SC6089 — NPN Triple Diffused Planar Silicon Transistor
Color TV Horizontal Deflection
Output Applications

Features

- High speed.
- High breakdown voltage (VCBO=1500V).
- Adoption of high reliability HVP process.
- Adoption of MBIT process.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		1500	V
Collector-to-Emitter Voltage	VCEO		700	V
Emitter-to-Base Voltage	VEBO		5	V
Collector Current	IC		10	A
Collector Current (Pulse)	ICP		25	A
Collector Dissipation	PC		3.0	W
		Tc=25°C	80	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	ICBO	VCB=800V, IE=0A			10	µA
Collector Cutoff Current	ICES	VCE=1500V, RBE=0Ω			1.0	mA
Collector Sustain Voltage	VCEO(sus)	IC=100mA, IB=0A	700			V
Emitter Cutoff Current	IEBO	VEB=4V, IC=0A			1.0	mA

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2SC6089

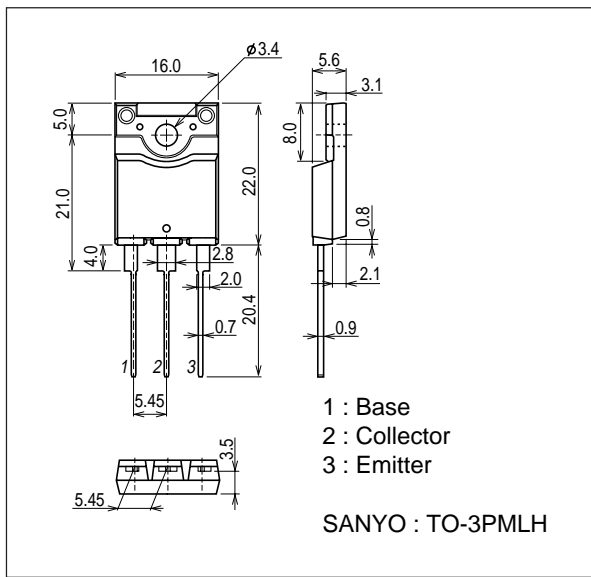
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=7.2A, I_B=1.44A$			3	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=7.2A, I_B=1.44A$			1.5	V
DC Current Gain	h_{FE1}	$V_{CE}=5V, I_C=1A$	15			
	h_{FE2}	$V_{CE}=5V, I_C=8A$	5		7	
Fall Time	t_f	$I_C=5A, I_{B1}=1A, I_{B2}=-2A$			0.2	μs

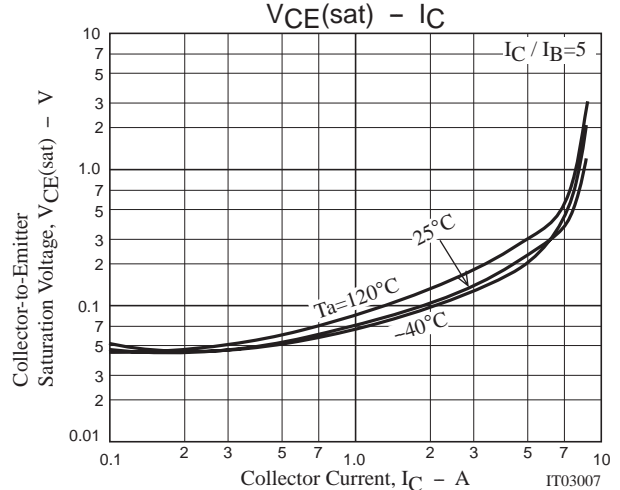
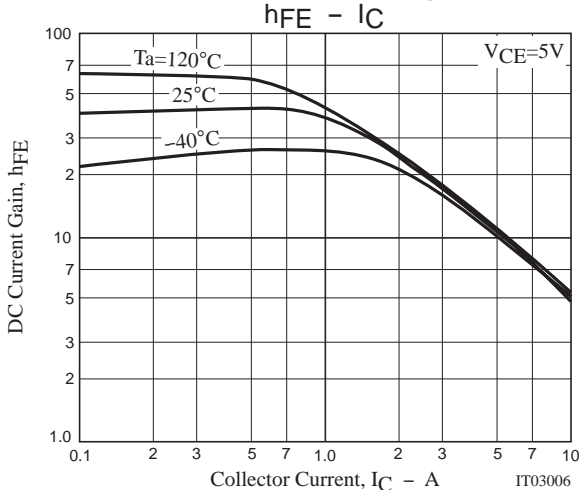
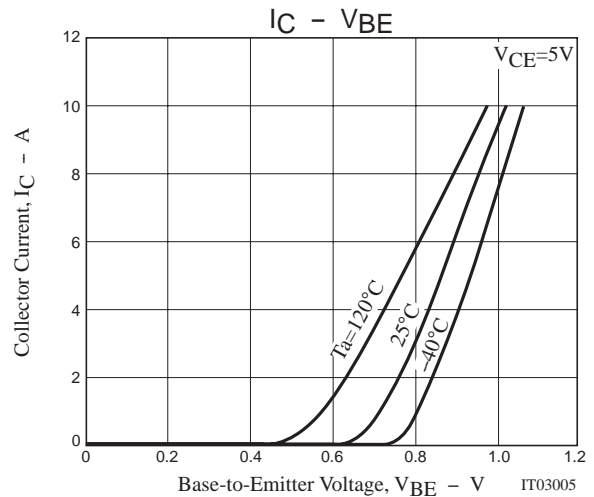
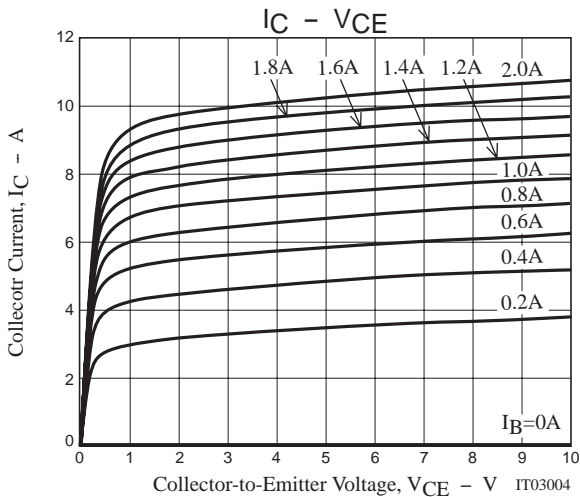
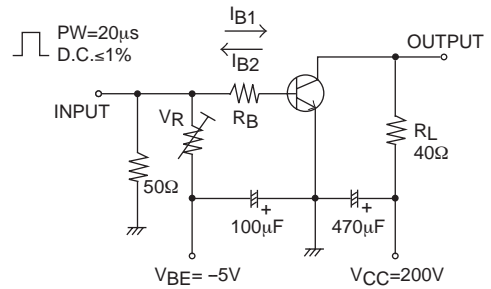
Package Dimensions

unit : mm (typ)

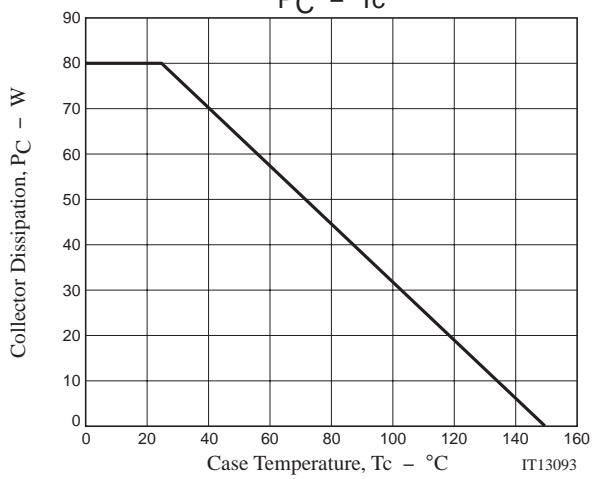
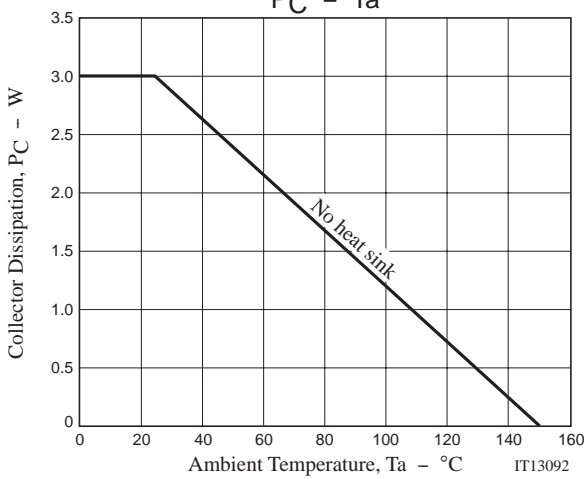
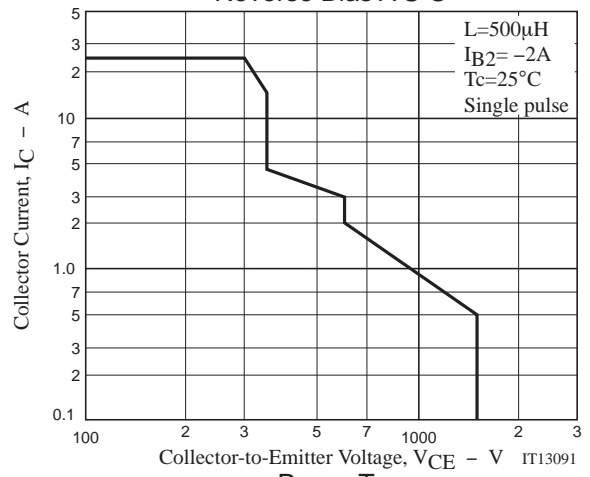
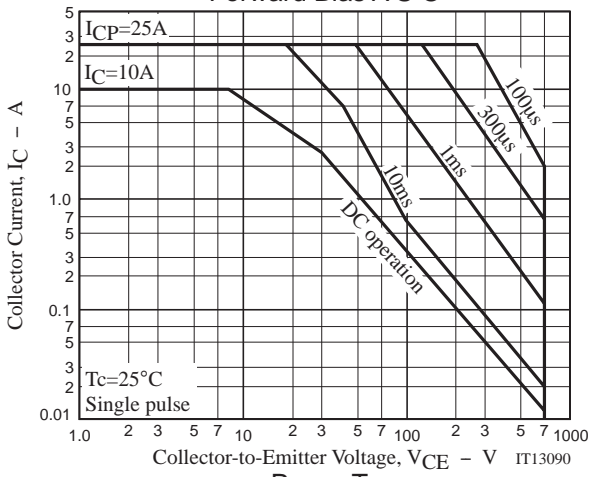
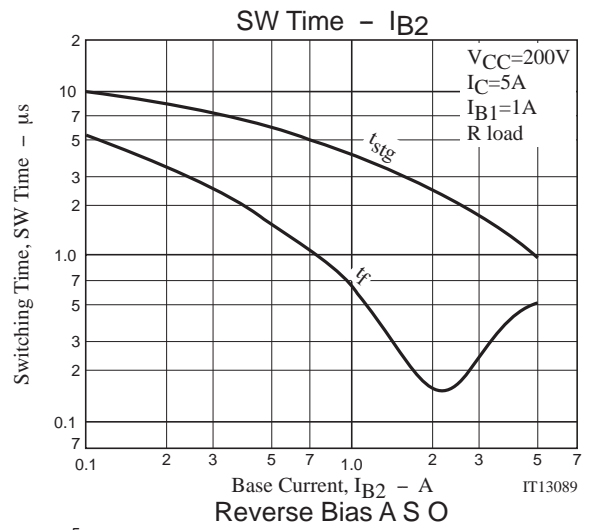
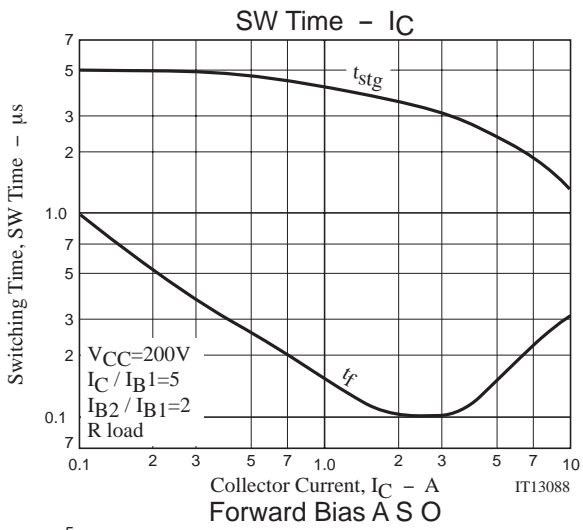
7504-001



Switching Time Test Circuit



2SC6089



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