

SANYO	No.2954	<h1 style="margin: 0;">2SC4125</h1> <p style="margin: 0;">NPN Triple Diffused Planar Silicon Transistor</p> <p style="margin: 0;">Very High-Definition Color Display Horizontal Deflection Output Applications</p>
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Features

- Adoption of MBIT process
- On-chip damper diode
- High breakdown voltage ($V_{CBO} = 1500V$)
- High speed ($t_f = 100ns$ typ.)
- High reliability (Adoption of HVP process)

Absolute Maximum Ratings at $T_a = 25^\circ C$

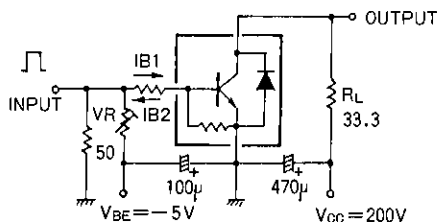
Collector-to-Base Voltage	V_{CBO}	1500	V	unit
Collector-to-Emitter Voltage	V_{CEO}	800	V	
Emitter-to-Base Voltage	V_{EBO}	6	V	
Collector Current	I_C	10	A	
Peak Collector Current	i_{cp}	25	A	
Collector Dissipation	P_C	3	W	
		$T_c = 25^\circ C$	70	W
Junction Temperature	T_j	150	$^\circ C$	
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$	

Electrical Characteristics at $T_a = 25^\circ C$

			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB} = 800V, I_E = 0$			10	μA
Collector Cutoff Current	I_{CES}	$V_{CE} = 1500V, R_{BE} = 0$			1	mA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100mA, I_B = 0$	800			V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$	40		130	mA
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 8A, I_B = 2A$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 8A, I_B = 2A$			1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5V, I_C = 1A$	8			
	$h_{FE(2)}$	$V_{CE} = 5V, I_C = 8A$	4		6	
Diode Forward Voltage	V_F	$I_{EC} = 10A$			2	V
Storage Time	t_{stg}	$I_C = 6A, I_{B1} = 1.2A$ $I_{B2} = -2.4A$			3	μs
Fall Time	t_f		0.1	0.2	μs	

Switching Time Test Circuit

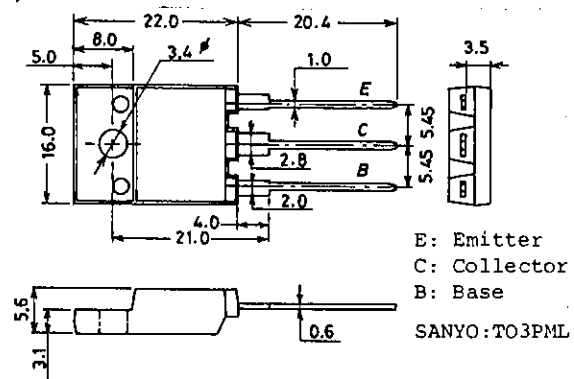
PW=20 μs
DC \leq 1%



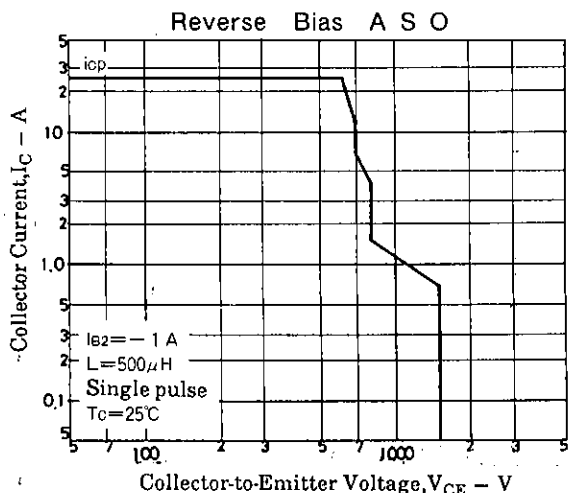
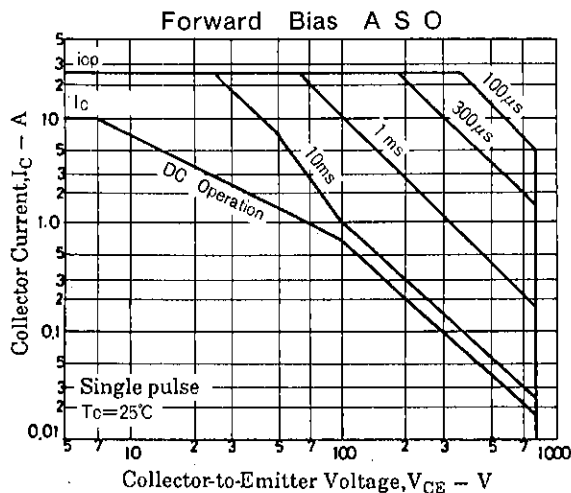
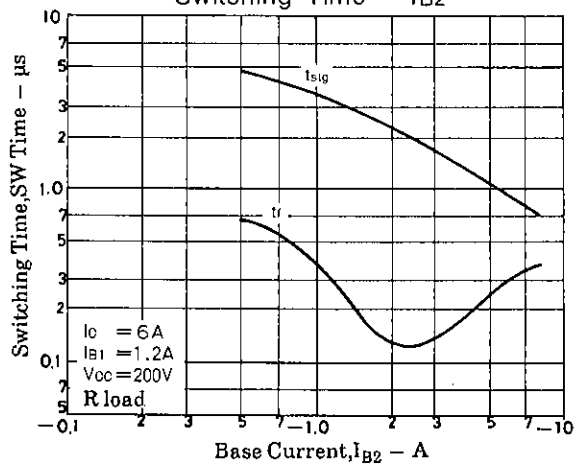
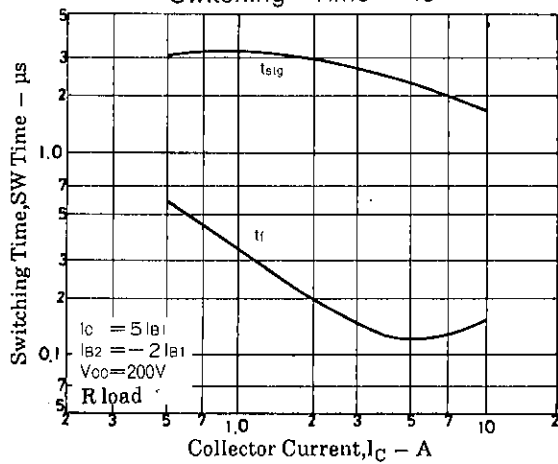
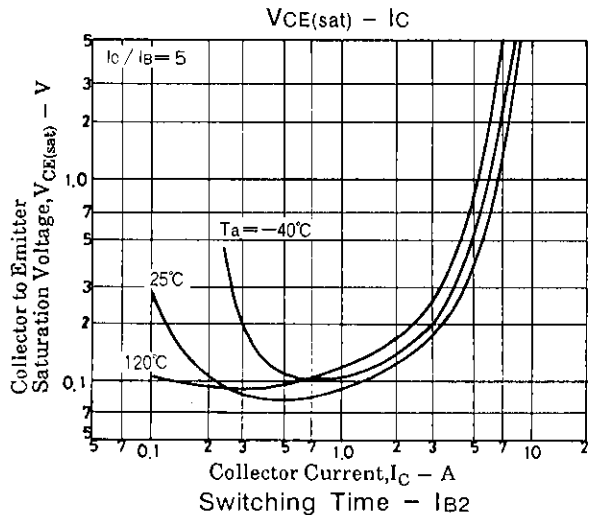
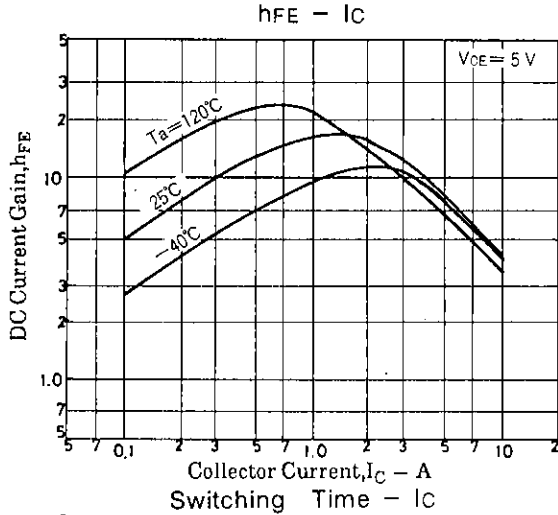
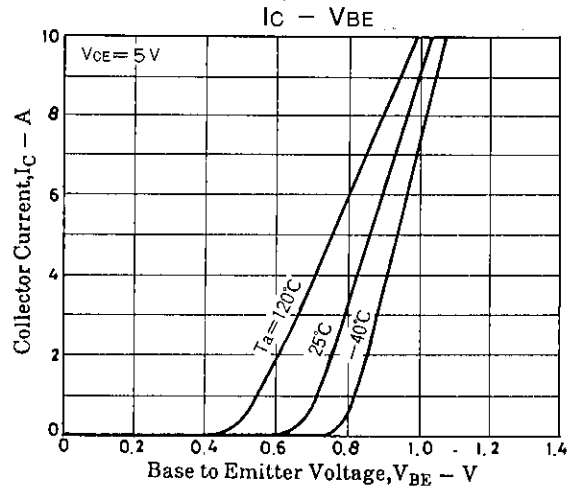
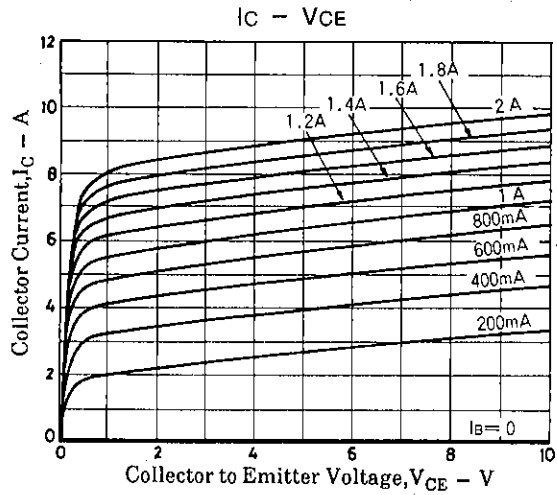
Unit (resistance:Ω, capacitance:F)

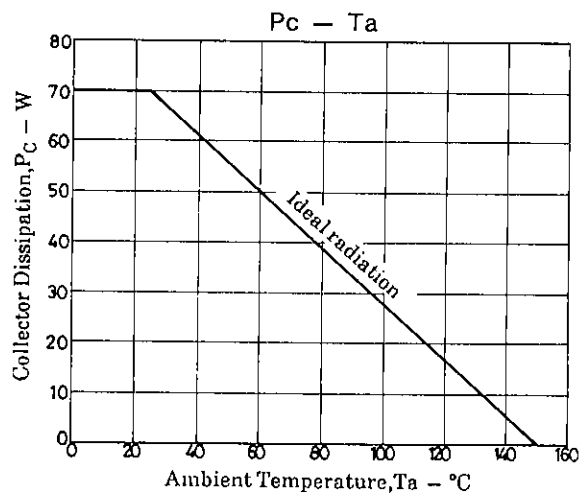
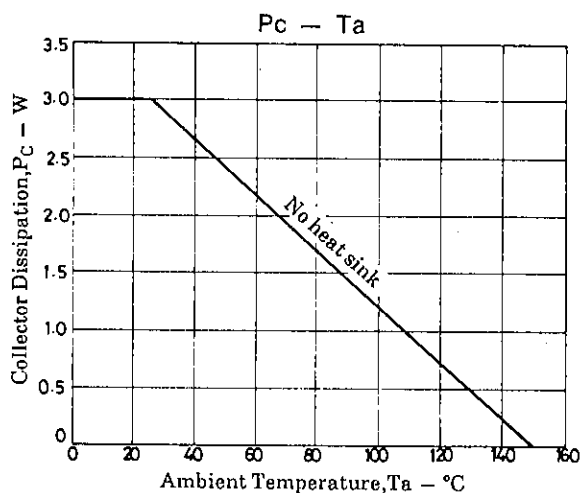
Package Dimensions 2039

(unit: mm)



2SC4125





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