Ordering number: EN4134

SANYO

No.4134

2SC4836

NPN Epitaxial Planar Silicon Transistor

20V/5A Switch Applications

Applications

· Strobes, power supplies, relay drivers, lamp drivers.

Features

· Large allowable collector dissipation.
· Low saturation voltage.
· Large current capacity.
· Fast switching speed.
· Usage of radial taping to meet automatic mounting.

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V_{CBO}	60	V
Collector-to-Emitter Voltage	V_{CEO}	20	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	5	A
Peak Collector Current	i_{cp}	8	A
Collector Dissipation	P_C	1.5	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB}=50V, I_E=0			100	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0			100	nA
DC Current Gain	$h_{FE}(1)$	V_{CE}=2V, I_C=500mA	120※		560※	
	$h_{FE}(2)$	V_{CE}=2V, I_C=3A	95			
Gain Bandwidth Product	f_T	V_{CE}=10V, I_C=50mA		120		MHz
Output Capacitance	C_{ob}	V_{CB}=10V, f=1MHz		45		pF

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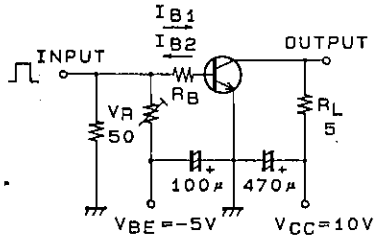
※ : The 2SC4836 is classified by 500mA h_{FE} as follows :

120 E 200	160 F 320	280 G 560

Switching Time Test Circuit

PW = 20μs
DC ≦ 1%

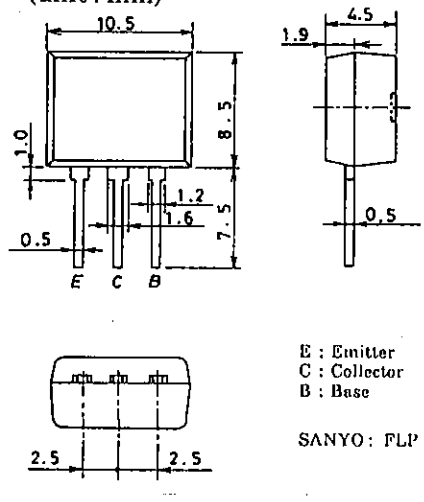


$I_C = 10I_{B1} = -10I_{B2} = 2A$ A00652

Unit (resistance : Ω, capacitance : F)

Package Dimensions 2084

(unit : mm)



E : Emitter
C : Collector
B : Base

SANYO : FLP

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			min	typ	max	unit
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=3A$, $I_B=60mA$		220	500	mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=3A$, $I_B=60mA$			1.5	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A$, $I_E=0$	60			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA$, $R_{BE}=\infty$	20			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A$, $I_C=0$	6			V
Turn ON Time	t_{on}	See specified Test Circuit.		30		ns
Storage Time	t_{stg}	〃		300		ns
Fall Time	t_f	〃		40		ns