

No.1719B

2SD1620

NPN Epitaxial Planar Silicon Transistor

1.5V, 3V Strobe Applications

Features

- Less power dissipation because of low $V_{CE(sat)}$, permitting more flashes of light to be emitted.
- · Large current capacity and highly resistant to breakdown.
- · Excellent linearity of hFE in the region from low current to high current.
- · Ultrasmall size supports high-density, ultrasmall-sized hybrid IC designs.

Absolute Maximum Ratings a				uni	t	
Collector-to-Base Voltage	${ m v_{CBO}}$			30	V	•
Collector-to-Emitter Voltage	V_{CEX}			20	V	
Collector-to-Emitter Voltage	V_{CEO}			10	V	
Emitter-to-Base Voltage	V_{EBO}			6	V	
Collector Current	I_C			3	A	
Collector Current (Pulse)	I_{CP}			5	Α	
Collector Dissipation	$P_{\mathbf{C}}$			500	mV	Ţ
		Mounted on a ceramic board (250mm ² ×0.8mm)		1.3	W	
Junction Temperature	Tj			150	°C	
Storage Temperature	Tstg		-55 t	o +150	°C	
Electrical Characteristics at Ta = 25°C			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 20V, I_E = 0$		• •	100	nА
Emitter Cutoff Current	$\mathbf{I_{EBO}}$	$V_{EB} = 4V, I_C = 0$			100	nA.
DC Current Gain	$\mathbf{h_{FE}}$	$V_{CE}=2V,I_{C}=3A$	140	210		
Gain-Bandwidth Product	$\mathbf{f_T}$	$V_{CE} = 10V, I_C = 50mA$		200		MHz
Output Capacitance	Cob	$V_{CB} = 10V$, $f = 1MHz$		30	•	pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=3A,I_B=60mA$		0.3	0.4	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	30			V
C-E Breakdown Voltage		$I_C = 1 \text{mA}, V_{BE} = 3 \text{V}$	20			V
C-E Breakdown Voltage		$I_C = 1 \text{mA}, R_{BE} = \infty$	10			v
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_{\rm E}$ = 10 μ A, $I_{\rm C}$ = 0	6			V

Package Dimensions 2038A

(unit : mm)

4.5

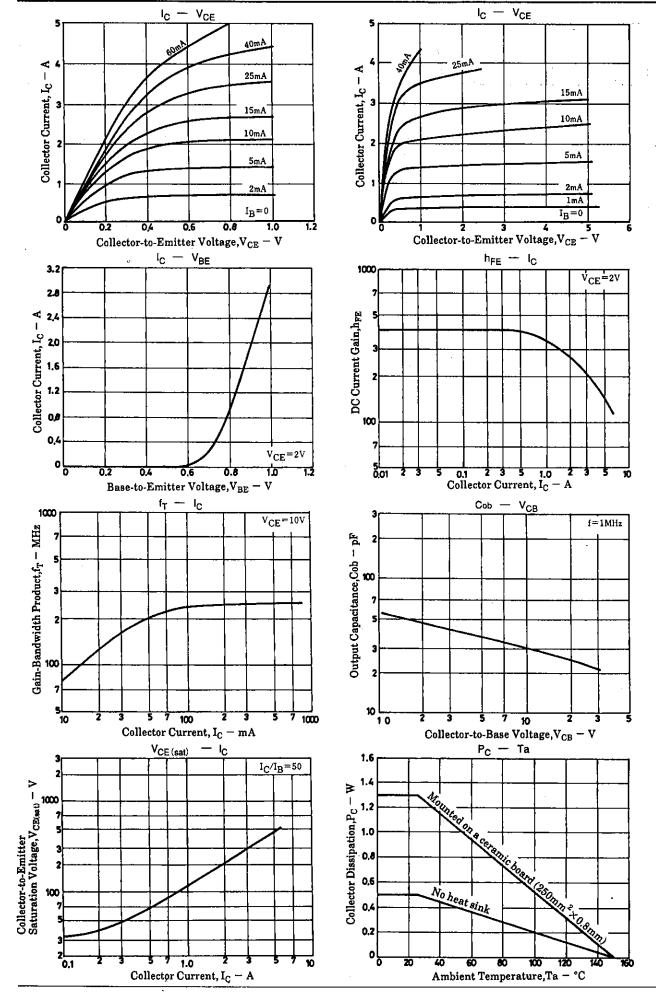
1.6

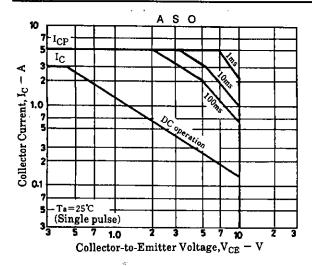
1.5

3.0

1 : Base
2 : Collector
3 : Emitter

SANYO: PCP





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