

No.2016A

NPN Epitaxial Planar Silicon Transistor

## **Driver Applications**

### **Applications**

. Motor drivers, hammer drivers, relay drivers, voltage regulator control

### **Features**

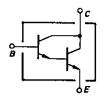
- . High DC current gain (h<sub>FE</sub>≥4000)
- . Wide ASO
- . Very small size making it easy to provide high-density, small-sized hybrid

Absolute Maximum Ratings at Ta	a=25 <sup>0</sup> C							unit
Collector to Base Voltage	$v_{\rm CBO}$						30	V
Collector to Emitter Voltage	e V <sub>CEO</sub>						25	v
Emitter to Base Voltage	V <sub>EBO</sub>						10	V
Collector Current	IC						2	A
Collector Current(Pulse)	$I_{CP}$						3	Α
	Pc				_		500	mW
_	Mounted	on	$\operatorname{ceramic}$	board	(250mm <sup>2</sup>	x 0.8mm)	1.5	W
•	Тj						150	ОС
Storage Temperature	Tstg				ė.	-55 to	+150	ОС
Collector Dissipation	P <sub>C</sub> Mounted Tj	on	ceramic	board	(250mm <sup>2</sup>	x 0.8mm)	1.5 150	o C

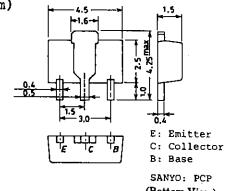
Electrical Characteristics Collector Cutoff Current Emitter Cutoff Current	I <sub>CBO</sub>	°C V <sub>CB</sub> =20V,I <sub>E</sub> =0 V <sub>EB</sub> =8V,I <sub>C</sub> =0	min	typ	max 1	unit µA
DC Current Gain	<sup>1</sup> EBO h <sub>FE</sub> (1) h <sub>FE</sub> (2)	V <sub>CE</sub> =2V,I <sub>C</sub> =500mA V <sub>CE</sub> =2V,I <sub>C</sub> =10mA	4000 3000			μA
Gain-Bandwidth Product	fT	$V_{CE} = 10V, I_{C} = 50mA$	_	120		MHz
C-E Saturation Voltage	VCE(sat)	$I_C = 600 \text{mA}, I_B = 0.15 \text{mA}$		0.9	1.5	V
p-p paragraph Aptrage	VBE(sat)	$I_{C}=600\text{mA}, I_{B}=0.15\text{mA}$			2.0	v
c-p preskdown voltage	V(BR)EBO		30			v
C-E DIGGROOMU AOTISE	V(BR)CEO	$L_{C} = IMA, R_{BE} = \infty$	25			V
E-B Breakdown Voltage	V(BR)EBO		. 10			v

Marking :DJ

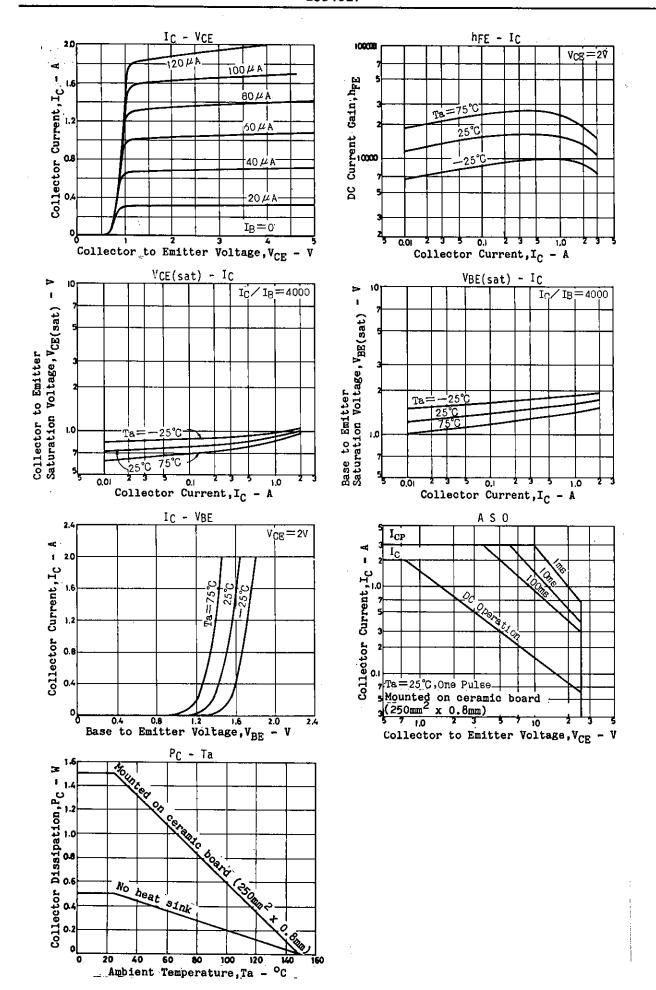
#### **Electrical Connection**



# Package Dimensions 2038 (unit:mm)



(Bottom View)



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