

SANYO

No.1201C

2SA1291/2SC3255

PNP/NPN Epitaxial Planar Silicon Transistors

60V/10A High-Speed Switching Applications

- Applications**
- Various inductance lamp drivers for electrical equipment.
 - Inverters, converters (strobo, flash, fluorescent lamp lighting circuit).
 - Power amp (high power car stereo, motor controller).
 - High-speed switching (switching regulator, driver).

- Features**
- Low saturation voltage.
 - Excellent current dependence of h_{FE} .
 - Short switching time.

() : 2SA1291

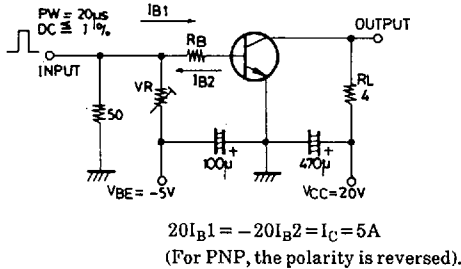
Absolute Maximum Ratings at Ta = 25°C				unit
Collector-to-Base Voltage	VCBO	(-)80		V
Collector-to-Emitter Voltage	VCEO	(-)60		V
Emitter-to-Base Voltage	VEBO	(-)5		V
Collector Current	IC	(-)10		A
Collector Current (Pulse)	ICP	(-)12		A
Collector Dissipation	PC	40		W
Junction Temperature	Tj	150		°C
Storage Temperature	Tstg	-55 to +150		°C

Electrical Characteristics at Ta = 25°C				min	typ	max	unit
Collector Cutoff Current	ICBO	VCB = (-)40V, IE = 0				(-)0.1	mA
Emitter Cutoff Current	IEBO	VEB = (-)4V, IC = 0				(-)0.1	mA
DC Current Gain	hFE	VCE = (-)2V, IC = (-)1A	70※			280※	
Gain-Bandwidth Product	fT	VCE = (-)5V, IC = (-)1A			100		MHz
C-E Saturation Voltage	VCE(sat)	IC = (-)5A, IB = (-)0.25A				(-)0.4	V
C-B Breakdown Voltage	V(BR)CBO	IC = (-)1mA, IE = 0	(-)80				V
C-E Breakdown Voltage	V(BR)CEO	IC = (-)1mA, RE = ∞	(-)60				V
E-B Breakdown Voltage	V(BR)EBO	IE = (-)1mA, IC = 0	(-)5				V
Turn-on Time	ton	See specified Test Circuit.			0.1		μs
Storage Time	tstg	"			0.5		μs
Fall Time	tr	"			0.1		μs

※ : The 2SA1291/2SC3255 are classified by 1A h_{FE} as follows

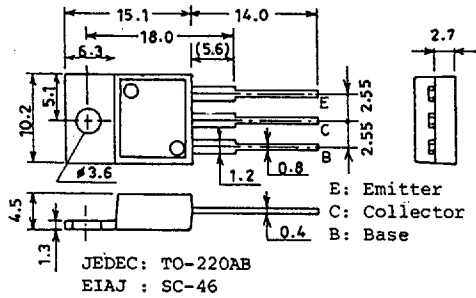
70	Q	140	100	R	200	140	S	280
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Switching Time Test Circuit



Unit (resistance : Ω, capacitance : F)

Package Dimensions 2010B (unit : mm)



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