

No.784E

2SD1145

NPN Epitaxial Planar Silicon Transistor

High-Current Driver Applications

Applications

. Relay drivers, hammer drivers, lamp drivers, strobe DC-DC convertrers, motor drivers.

Features

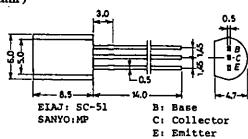
- · Low saturation voltage
- · Large current capacity and wide ASO

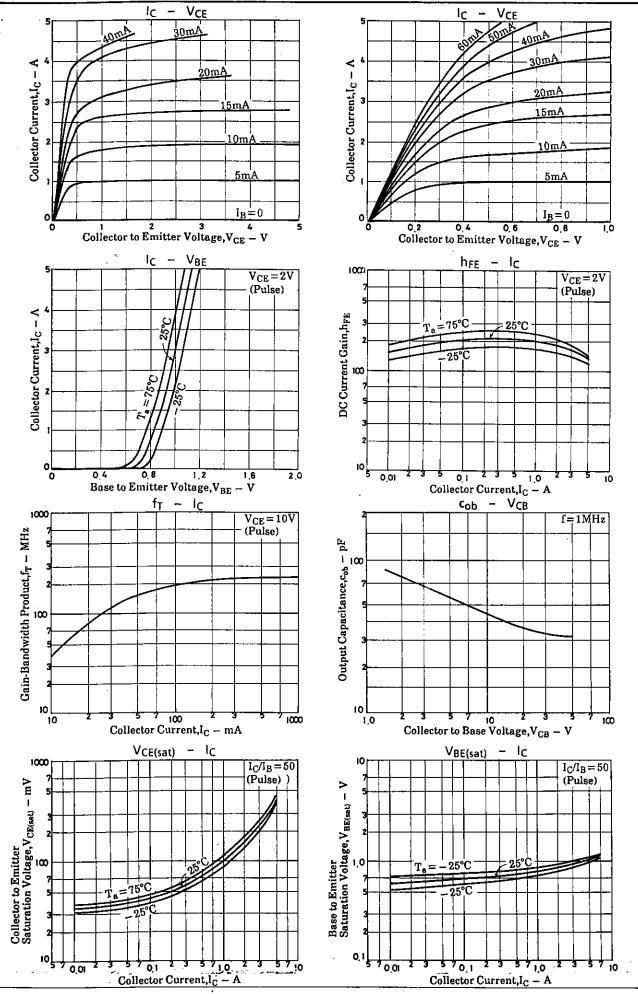
Absolute Maximum Ratings at T	a = 25°C			u	nit	
Collector to Base Voltage	V_{CBO}		60)	V	
	V_{CEO}		20)	V	
Emitter to Base Voltage	V_{EBO}		6	;	V	
Collector Current	$I_{\mathbf{C}}$		5	;	Α	
Collector Current(Pulse)	I_{CP}	100ms, single pulse	8	}	Α	
Collector Dissipation	PC		0.9)	W	
Junction Temperature	Tj		150)	$^{\circ}\mathrm{C}$	
Storage Temperature	Tstg		-55 to +150		$^{\circ}\mathrm{C}$	
Electrical Characteristics at Ta =	= 25°C		min ty	מי	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 50V, I_E = 0$	•	•	1.0	μΑ
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = 2V, I_{C} = 0.5A$	100*		560ж	
	$h_{FE}(2)$	$V_{CE} = 2V, I_C = 3A \text{ (Pulse)}$	75			
Gain-Bandwidth Product	$\mathbf{f}_{\mathbf{\Gamma}}$	$V_{CE} = 10V, I_{C} = 50mA$	12	20		MHz
Output Capacitance	c _{ob}	$V_{CB} = 10V, f = 1MHz$	4	15		\mathbf{pF}
C-E Saturation Voltage	V _{CE(sat)}	$I_C = 3A$, $I_B = 60$ mA (Pulse)			0.5	·v
B-E Saturation Voltage	V _{BE(sat)}	$I_C = 3A$, $I_B = 60$ mA (Pulse)			1.5	V

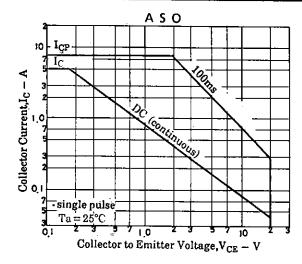
%: The 2SD1145 is classified by 0.5A h_{FE} as follows:

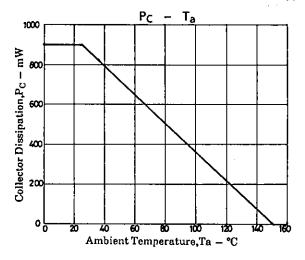
100	E	200	160	F	320	280	G	560	-

Package Dimensions 2006A (unit: mm)









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