

# SILICON POWER TRANSISTOR

# 2SA1843

## PNP SILICON EPITAXIAL POWER TRANSISTOR FOR HIGH-SPEED SWITCHING

The 2SA1843 is a power transistor developed for high-speed switching and features a high  $h_{FE}$  at low  $V_{CE(sat)}$ . This transistor is ideal for use as a driver in DC/DC converters and actuators.

In addition, this transistor features a package that can be auto-mounted in radial taping specifications, thus contributing to mounting cost reduction.

### FEATURES

- Auto-mounting possible in radial taping specifications
- Resin-molded insulation type package with power rating of 1.8 W in stand-alone conditions
- High  $h_{FE}$  and low  $V_{CE(sat)}$ :  
 $V_{CE(sat)} \leq -0.3 \text{ V}$  @  $I_C = -3.0 \text{ A}$ ,  $I_B = -0.15 \text{ A}$   
 $h_{FE} \geq 100$  @  $V_{CE} = -2.0 \text{ V}$ ,  $I_C = -1.0 \text{ A}$
- Fast switching speed

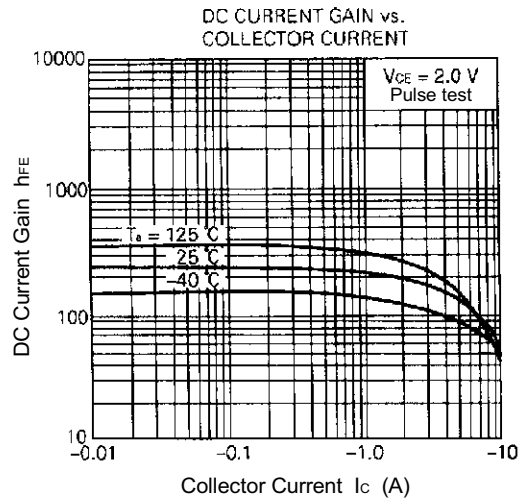
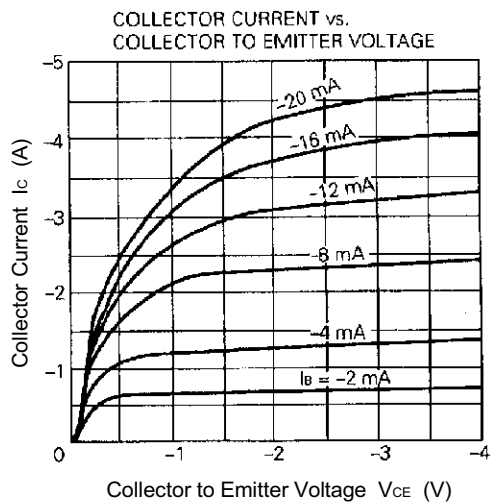
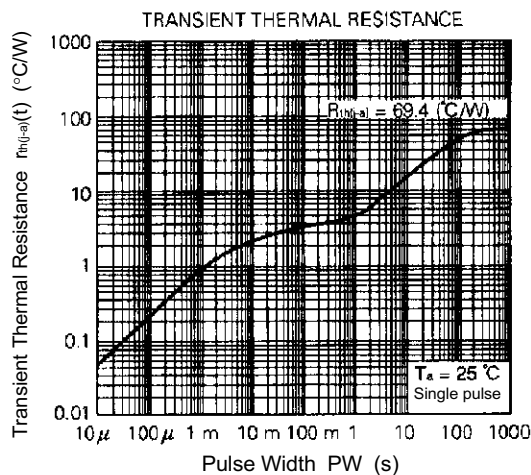
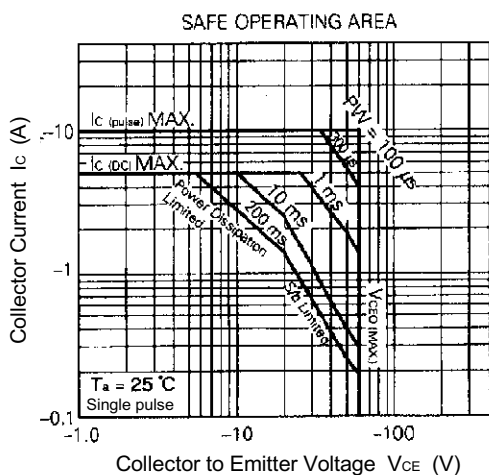
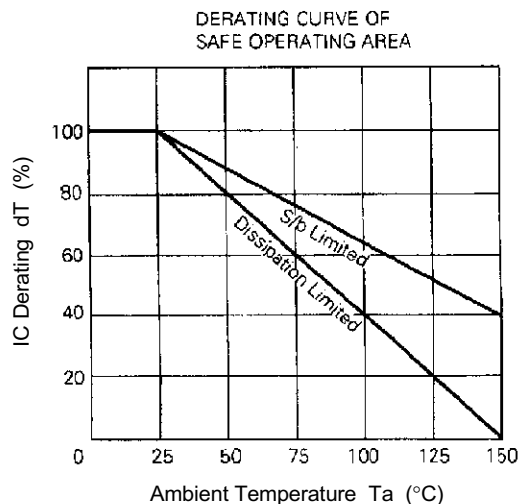
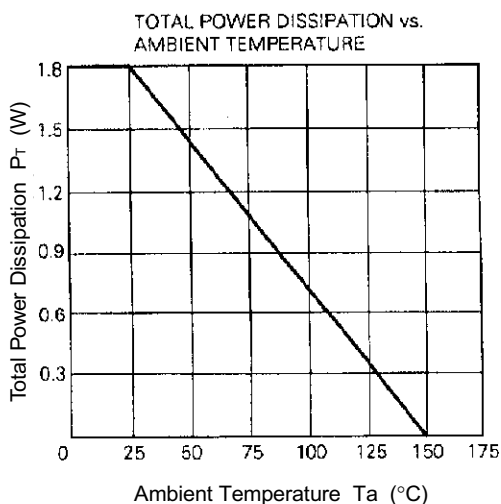
### ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Conditions	Ratings	Unit
Collector to base voltage	$V_{CBO}$		-100	V
Collector to emitter voltage	$V_{CEO}$		-60	V
Emitter to base voltage	$V_{EBO}$		-7.0	V
Collector current (DC)	$I_{C(DC)}$		-5.0	A
Collector current (pulse)	$I_{C(pulse)}$	$PW \leq 300 \mu s$ , duty cycle $\leq 2\%$	-10	A
Base current (DC)	$I_{B(DC)}$		-2.5	A
Total power dissipation	$P_T$	Ta = 25°C	1.8	W
Junction temperature	$T_j$		150	°C
Storage temperature	$T_{stg}$		-55 to +150	°C

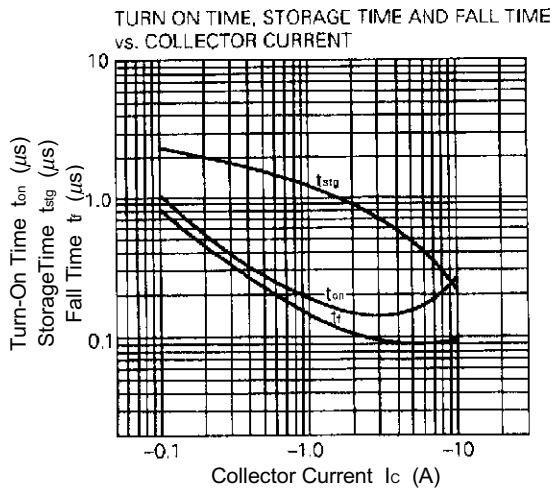
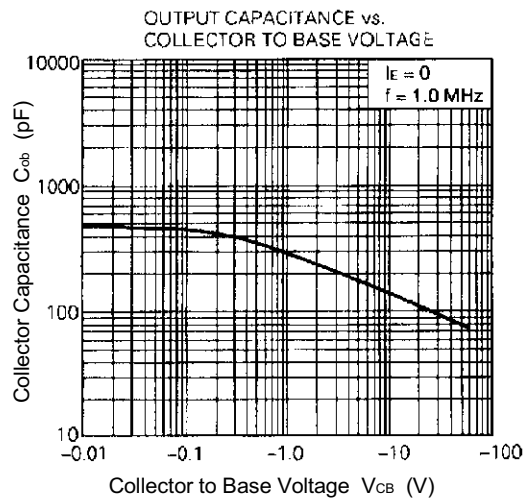
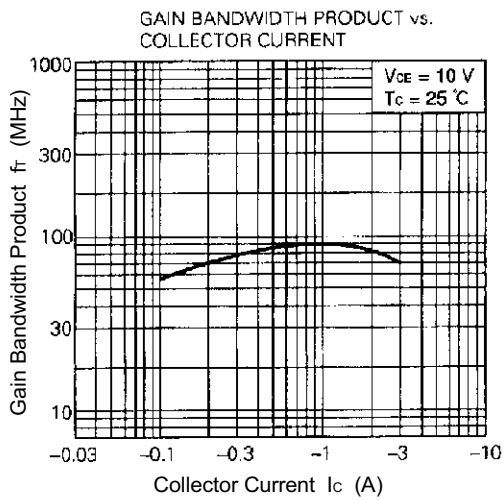
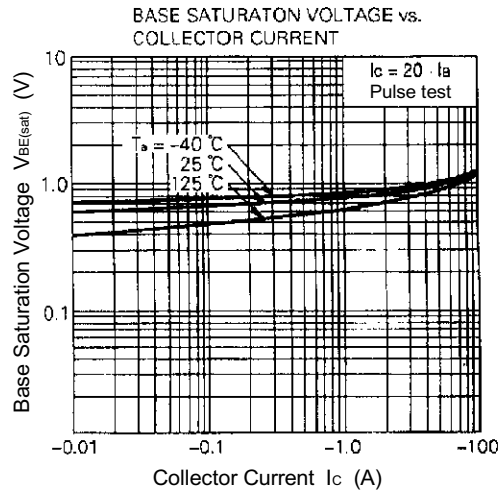
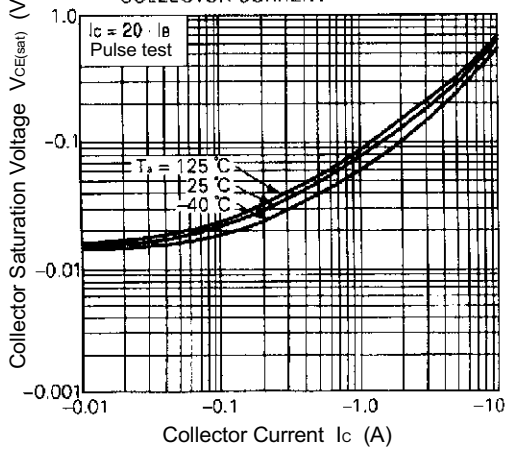
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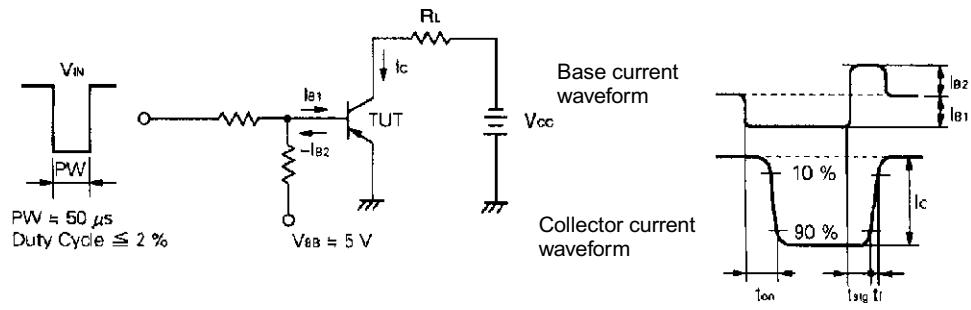
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 TYPICAL CHARACTERISTICS (Ta = 25°C)



查询"2SA1843"供应商  
 COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



[查询2SA1843N供应商](#) SWITCHING TIME ( $t_{on}$ ,  $t_{stg}$ ,  $t_f$ ) TEST CIRCUIT



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