Power Transistors

Panasonic

2SA2067

Silicon PNP epitaxial planar type

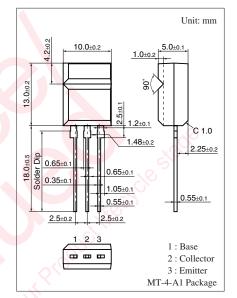
Power supply for audio & visual equipments such as TVs and VCRs Industrial equipments such as DC-DC converters

Features

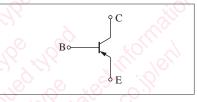
- High speed switching (t_{stg}: storage time/t_f: fall time is short)
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- \bullet Superior forward current transfer ratio h_{FE} linearity
- Allowing automatic insertion eith radial taping

Absolute Maximum Ratings $T_c = 25^{\circ}C$					
Parameter	Symbol	Rating	Unit		
Collector-base voltage (Emitter open)	V _{CBO}	-60	v		
Collector-emitter voltage (Base open)	V _{CEO}	-60	V		
Emitter-base voltage (Collector open)	V _{EBO}	-6	v		
Collector current	I _C	-3	А		
Peak collector current	I _{CP}	-6	А		
Collector power dissipation	P _C	15	W		
$T_a = 25^{\circ}C$		2.0	\$0V		
Junction temperature	Tj	150	°C		
Storage temperature	T _{stg}	-55 to +150	°C		
			-1/1		

Absolute Maximum Ratings T_C = 25°C



Internal Connection



Electrical Characteristics $T_C = 25^{\circ}C \pm 3^{\circ}C$

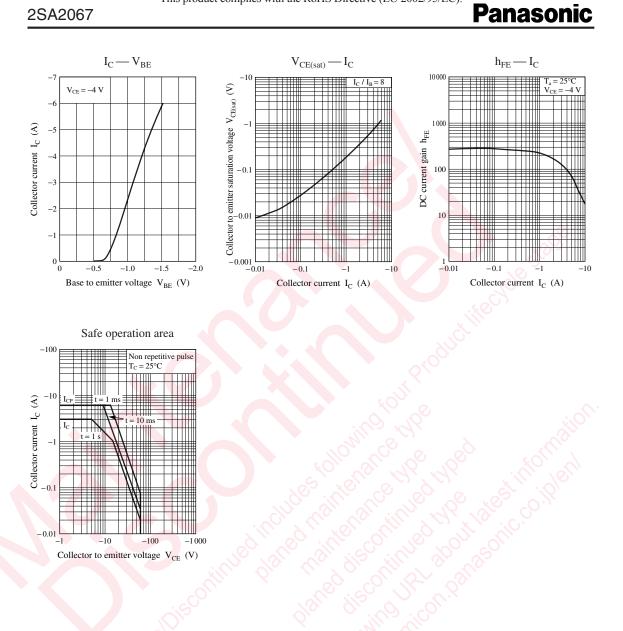
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -10 \text{ mA}, I_{\rm B} = 0$	-60			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = -60 \text{ V}, I_E = 0$			-100	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = -60 \text{ V}, I_B = 0$			-100	μΑ
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = -6 V, I_C = 0$			-1	mA
Forward current transfer ratio	h _{FE1} *	$V_{CE} = -4 V, I_C = -1 A$	120		320	—
C C C C C C C C C C C C C C C C C C C	h _{FE2}	$V_{CE} = -4 V, I_C = -3 A$	40			
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -3$ A, $I_{\rm B} = -375$ mA			- 0.8	V
Transition frequency	f _T	$V_{CE} = -10 \text{ V}, I_C = -0.1 \text{ A}, f = 10 \text{ MHz}$		90		MHz
Turn-on time	t _{on}	$I_{\rm C} = -1$ A, Resistance loaded			0.3	μs
Storage time	t _{stg}	$I_{B1} = -0.1 \text{ A}, I_{B2} = 0.1 \text{ A}$			0.7	μs
Fall time	t _f	$V_{CC} = 50 V$			0.15	μs

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

Rank	Q	Р
$h_{\rm FE1}$	120 to 250	160 to 320

2SA2067



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