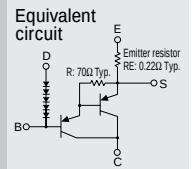


Built-in temperature
compensation diodes
Built-in emitter resistor
Darlington

SAP09P



(Complement to type SAP09N)

Application: Audio

■ Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
VCBO	150	V
VCEO	-150	V
VEBO	-5	V
IC	-10	A
IB	-1	A
PC	80 (Tc=25°C)	W
Di IF	10	mA
TJ	150	°C
Tstg	-40 to +150	°C

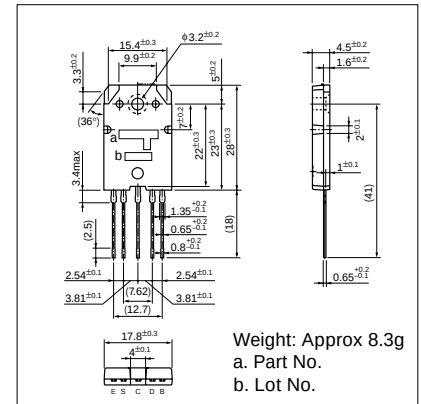
■ Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings			Unit
		min	typ	max	
ICBO	VCE = -150V			-100	μA
IEBO	VEB = -5V			-100	μA
VCEO	IC = -30mA	-150			V
hFE *	VCE = -4V, IC = -6A	5000		20000	
VCE(sat)	IC = -6A, IB = -6mA			-2.0	V
VBE(sat)	IC = -6A, IB = -6mA			-2.5	V
VBE	VCE = -20V, IC = -40mA		1230		mV
Di VF	IF = 2.5mA		1580		mV
RE	IE = 1A	0.176	0.22	0.264	Ω

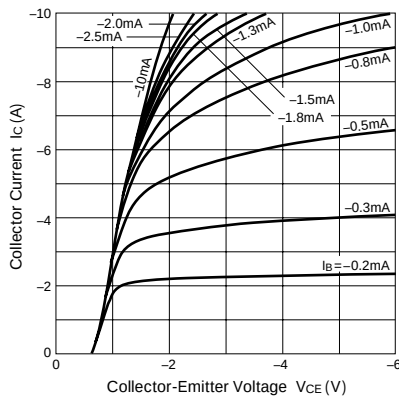
*hFE Rank $\bar{O}$ (5000 to 12000), Y (8000 to 20000)

External Dimensions

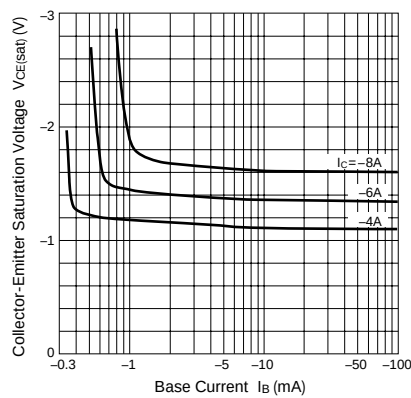
(Unit: mm)



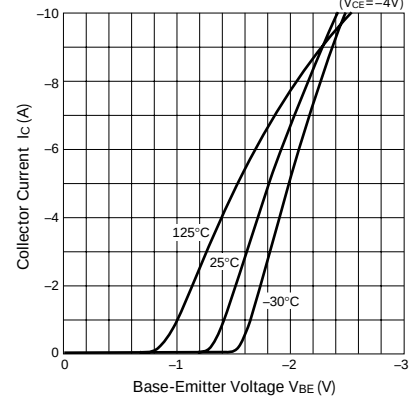
IC-VCE Characteristics (Typical)



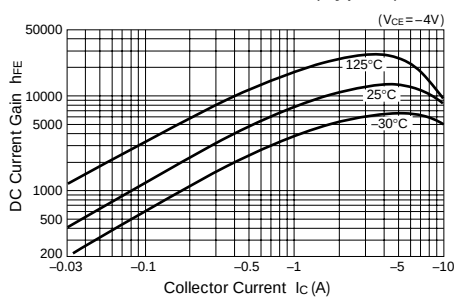
VCE(sat)-IB Characteristics (Typical)



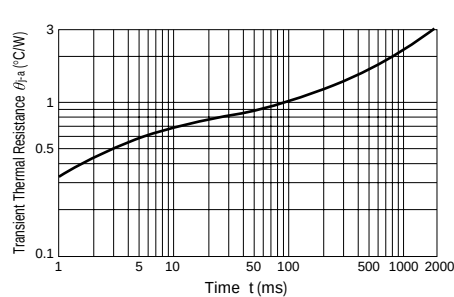
IC-VBE Temperature Characteristics (Typical)



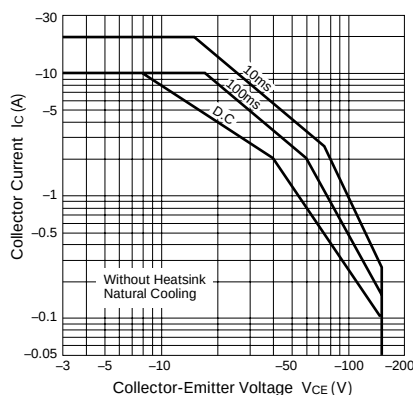
hFE-IC Characteristics (Typical)



θJA-t Characteristics



Safe Operating Area (Single Pulse)



PC-Ta Derating

