

SAP 10P

Application: Audio

■ Absolute maximum ratings (T_a=25°C)

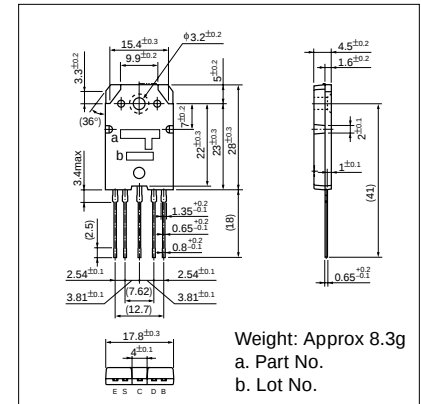
Symbol	Ratings	Unit
V _{CBO}	−150	V
V _{CEO}	−150	V
V _{EBO}	−5	V
I _C	−12	A
I _B	−1	A
P _C	100 (T _C = 25°C)	W
Di I _F	10	mA
T _J	150	°C
T _{stg}	−40 to +150	°C

■Electrical Characteristics (Ta=25°C)

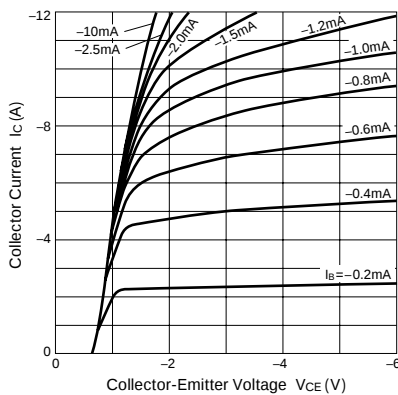
Symbol	Conditions	Ratings			Unit
		min	typ	max	
ICBO	$V_{CB} = -150V$			-100	μA
IEBO	$V_{EB} = -5V$			-100	μA
V_{CEO}	$I_C = -30mA$	-150			V
h_{FE}^*	$V_{CE} = -4V, I_C = -7A$	5000		20000	
$V_{CE(sat)}$	$I_C = -7A, I_B = -7mA$			-2.0	V
$V_{BE(sat)}$	$I_C = -7A, I_B = -7mA$			-2.5	V
V_{BE}	$V_{CE} = -20V, I_C = -40mA$		1210		mV
$Di V_F$	$I_F = 2.5mA$		1540		mV
R_E	$I_E = 1A$	0.176	0.22	0.264	Ω

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

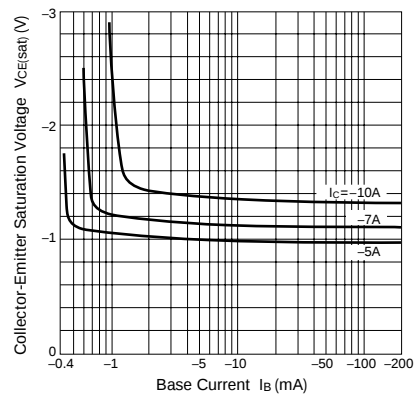
External Dimensions (Unit: mm)



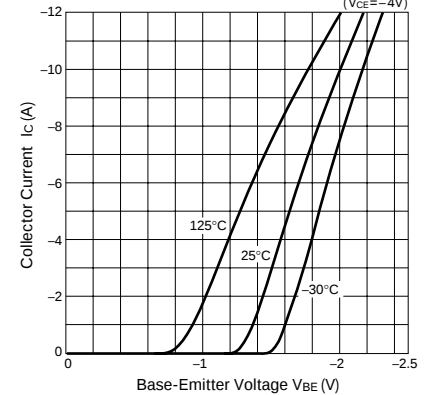
IC–VCE Characteristics (Typical)



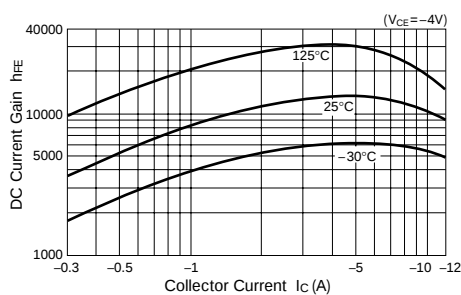
V_{CE(sat)}–I_B Characteristics (Typical)



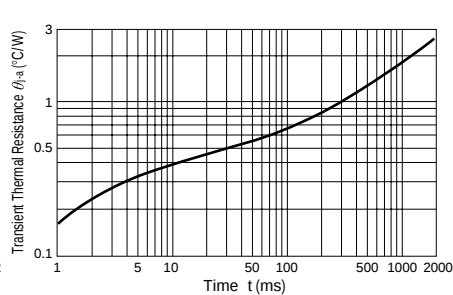
IC – V_{BE} Temperature Characteristics (Typical)



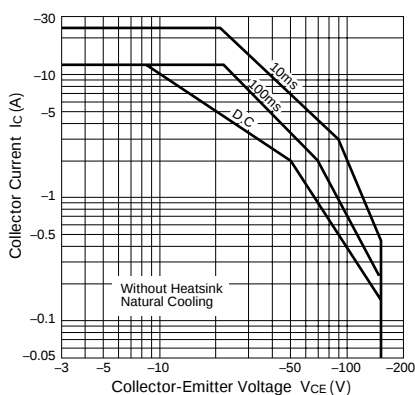
$h_{FE}-I_C$ Characteristics (Typical)



θ_{j-a-t} Characteristics



Safe Operating Area (Single Pulse)



Pc-Ta Derating

