STA408A

PNP Darlington
General purpose

External dimensions Ⓓ ··· STA (10-pin)

Absolute maximum ratings

(T_a=25°C)

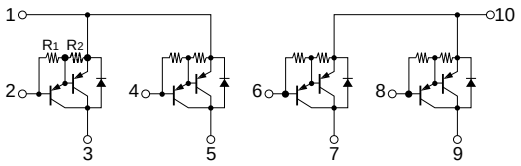
Symbol	Ratings	Unit
V_{CBO}	–120	V
V_{CEO}	–120	V
V_{EBO}	–6	V
I_C	–4	A
I_B	–1	A
P_T	4 (T_a=25°C)	W
	20 (T_C=25°C)	
T_j	150	°C
T_{stg}	–40 to +150	°C

Electrical characteristics

(T_a=25°C)

Symbol	Specification			Unit	Conditions
	min	typ	max		
I_{CBO}			–10	μA	V_{CB}=–120V
I_{EBO}			–10	mA	V_{EB}=–6V
V_{CEO}	–120			V	I_C=–10mA
h_{FE}	2000				V_{CE}=–4V, I_C=–2A
V_{CE}(sat)			–1.5	V	I_C=–2A, I_B=–4mA
V_{BE}(sat)			–2.5	V	

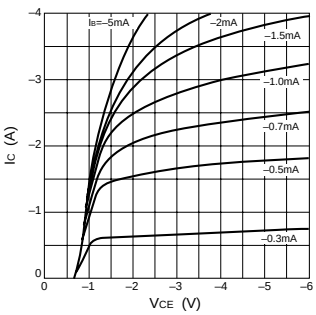
■Equivalent circuit diagram



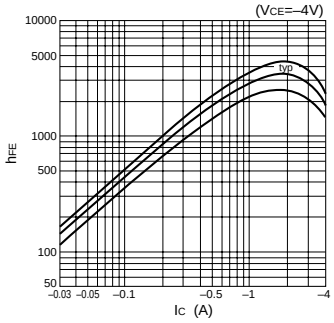
R_1: 5kΩ typ R_2: 100Ω typ

Characteristic curves

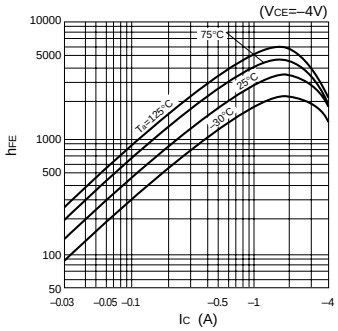
I_C-V_{CE} Characteristics (Typical)



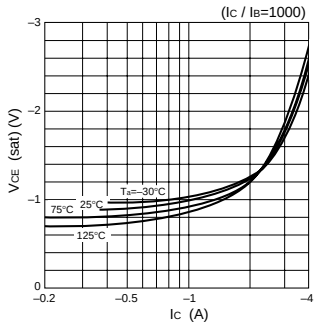
h_{FE}-I_C Characteristics (Typical)



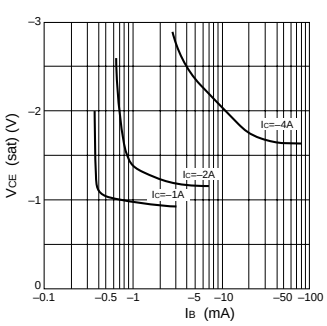
h_{FE}-I_C Temperature Characteristics (Typical)



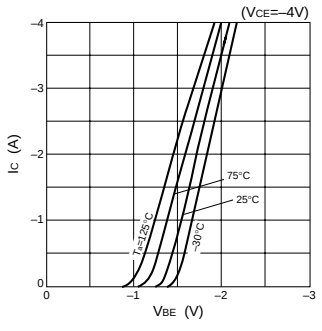
V_{CE}(sat)-I_C Temperature Characteristics (Typical)



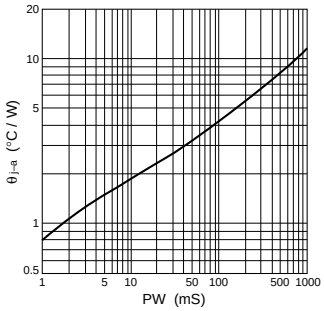
V_{CE}(sat)-I_B Characteristics (Typical)



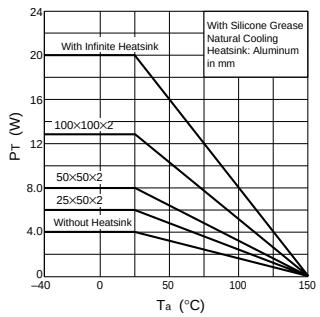
I_C-V_{BE} Temperature Characteristics (Typical)



$\theta_{j\text{-}a}$-PW Characteristics



P_T-T_a Characteristics



Safe Operating Area (SOA)

