SLA4071

PNP Darlington
With built-in flywheel diode

External dimensions Ⓐ ··· SLA (12-pin)

Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V_{CBO}	–100	V
V_{CEO}	–100	V
V_{EBO}	–6	V
I_C	–5	A
I_{CP}	–8 (PW≤1ms, Du≤50%)	A
I_B	–0.5	A
I_F	–5 (PW≤0.5ms, Du≤25%)	A
I_{FSM}	–8 (PW≤10ms, single)	A
V_R	120	V
P_T	5 (Ta=25°C)	W
	25 (Tc=25°)	
V_{ISO}	1000 (Between fin and lead pin, AC)	Vrms
T_j	150	°C
T_{stg}	–40 to +150	°C
$\theta_{j\text{-}c}$	5	°C/W

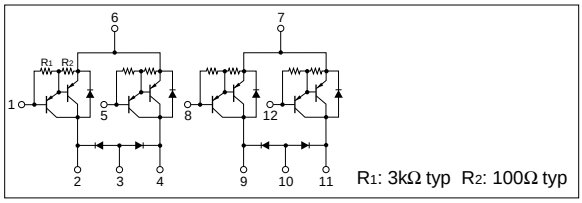
Electrical characteristics (Ta=25°C)

Symbol	Specification min	typ	max	Unit	Conditions
I_{CBO}			–10	μA	V_{CB}=–100V
I_{EBO}			–10	mA	V_{EB}=–6V
V_{CEO}	–100			V	I_C=–10mA
h_{FE}	2000	5000	15000		V_{CE}=–2V, I_C=–3A
V_{CE}(sat)		–1.0	–1.5	V	I_C=–3A, I_B=–6mA
V_{BE}(sat)		–1.6	–2.0	V	

●Diode for flyback voltage absorption (Ta=25°C)

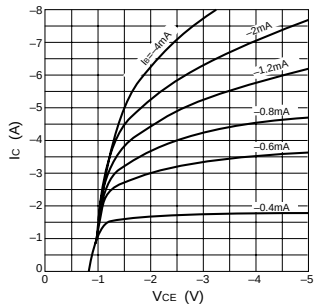
Symbol	Specification min	typ	max	Unit	Conditions
V_R	120			V	I_R=10μA
V_F			1.2	V	I_F=1A
I_R			10	μA	V_R=120V
trr		100		ns	I_F=±100mA

■Equivalent circuit diagram

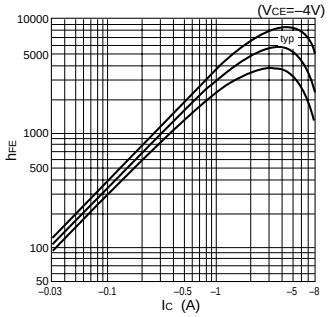


Characteristic curves

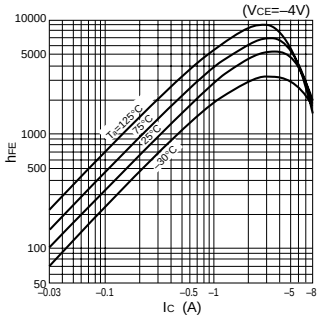
I_C-V_{CE} Characteristics (Typical)



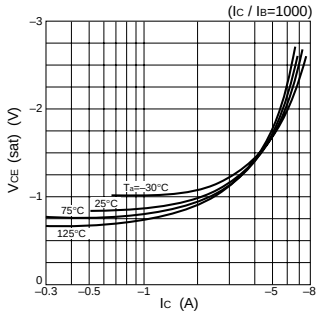
h_{FE}-I_C Characteristics (Typical)



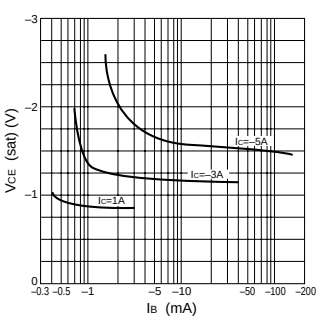
h_{FE}-I_C Temperature Characteristics (Typical)



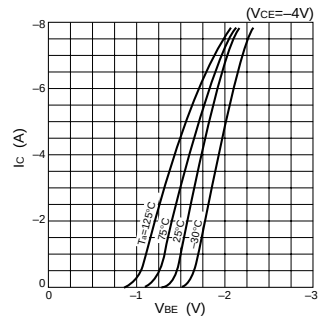
V_{CE}(sat)-I_C Temperature Characteristics (Typical)



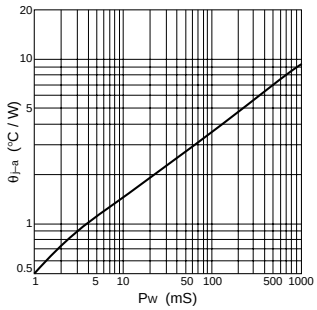
V_{CE}(sat)-I_B Characteristics (Typical)



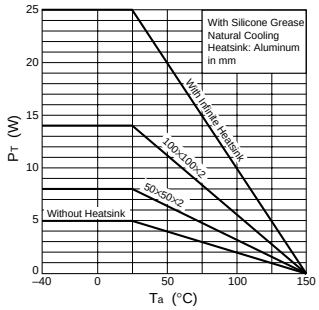
I_C-V_{BE} Temperature Characteristics (Typical)



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



P_T-T_a Characteristics



Safe Operating Area (SOA)