SLA4310

PNP + NPN
H-bridge

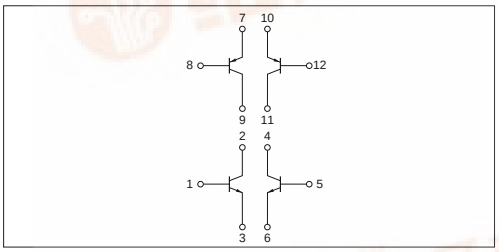
External dimensions Ⓐ···SLA

Absolute maximum ratings

(Ta=25°C)

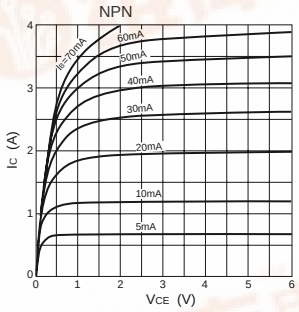
Symbol	Ratings		Unit
	NPN	PNP	
V_{CBO}	60	–60	V
V_{CEO}	60	–60	V
V_{EBO}	6	–6	V
I_C	4	–4	A
I_{CP}	6 (PW≤1ms, Du≤50%)	–6 (PW≤1ms, Du≤50%)	A
I_B	1	–1	A
P_T	5 (Ta=25°C)		W
	25 (Tc=25°C)		
V_{ISO}	1000 (Between fin and lead pin, AC)		V_{rms}
T_j	150		°C
T_{stg}	–40 to +150		°C
θ_{j-c}	5		°C/W

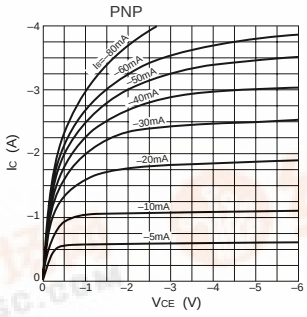
■Equivalent circuit diagram



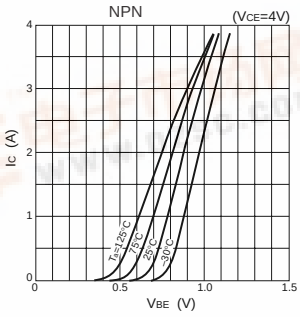
Characteristic curves

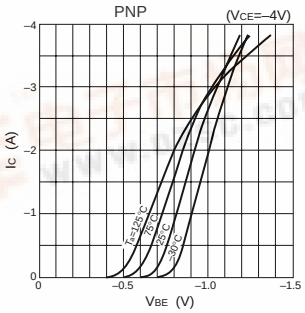
IC-VCE Characteristics (Typical)



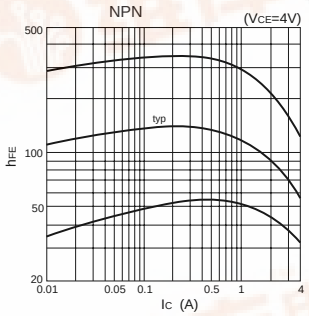


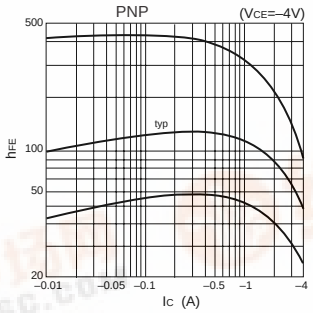
IC-VBE Temperature Characteristics (Typical)



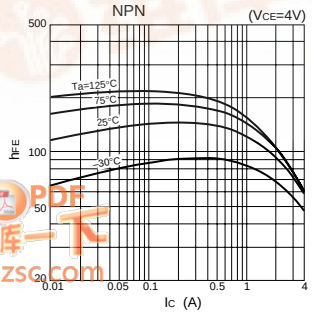


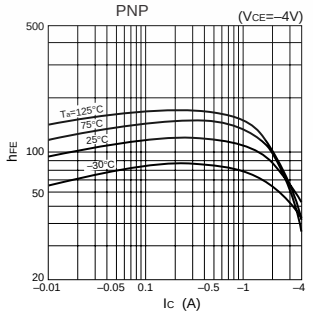
hFE-IC Characteristics (Typical)





hFE-IC Temperature Characteristics (Typical)





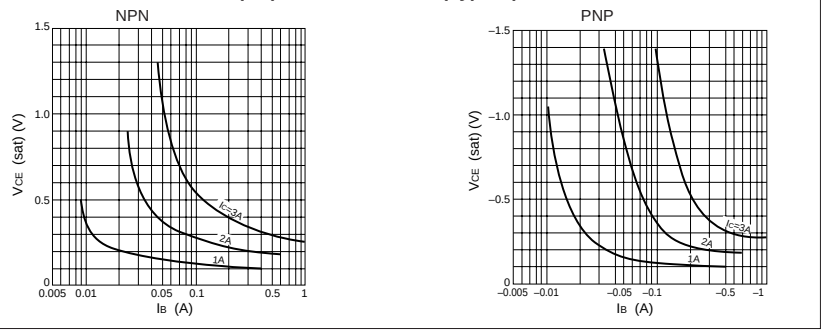
Electrical characteristics

(Ta=25°C)

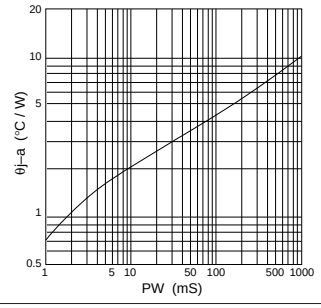
Symbol	NPN					PNP				
	Specification			Unit	Conditions	Specification			Unit	Conditions
	min	typ	max			min	typ	max		
I_{CBO}			10	μA	V_{CB}=60V			–10	μA	V_{CB}=–60V
I_{EBO}			10	μA	V_{EB}=6V			–10	μA	V_{EB}=–6V
V_{CEO}	60			V	I_C=25mA	–60			V	I_C=–25mA
h_{FE}	80				V_{CE}=4V, I_C=1A	80				V_{CE}=–4V, I_C=–1A
V_{CE}(sat)			0.6	V	I_C=2A, I_B=0.2A			–0.6	V	I_C=–2A, I_B=–0.2A

Characteristic curves

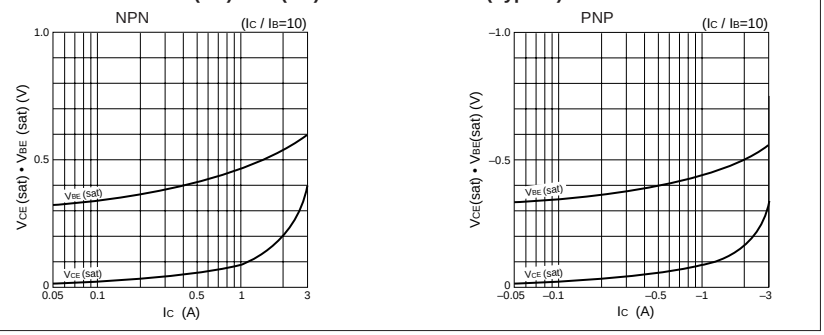
V_{CE}(sat)-I_B Characteristics (Typical)



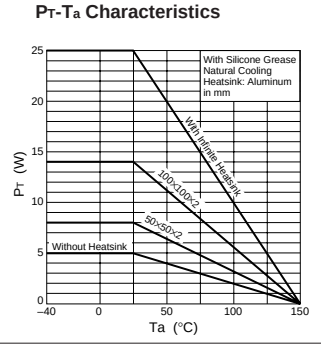
θ_{j-a}-PW Characteristics



V_{CE}(sat) • V_{BE}(sat)-I_C Characteristics (Typical)



P_T-T_a Characteristics



Safe Operating Area (SOA)