SLA4313

NPN
PNP **Silicon Epitaxial Planar**

☐Absolute maximum ratings

(Ta=25°C)

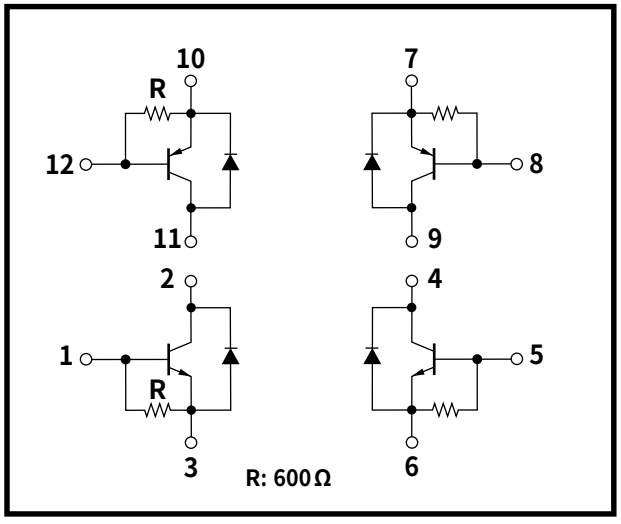
Parameter	Symbol	NPN	PNP	Unit
Collector-Base Voltage	V_{CBO}	35	−35	V
Collector-Emitter Voltage	V_{CEO}	35	−35	V
Emitter-Base Voltage	V_{EBO}	6	−6	V
Collector Current	I_C	5	−5	A
Collector Current	I_{CP}	8 (Pw≦1ms, Du≦50%)	−8 (Pw≦1ms, Du≦50%)	A
Base Current	I_B	1	−1	A
Total Power Dissipation	P_T	5 (Ta=25°C)		W
		25 (Tc=25°C)		
Isolation Voltage	V_{ISO}	1000 (Between fin and lead pin, AC)		Vrms
Storage Temperature	Tstg	−40 to +150		°C

☐Electrical characteristics

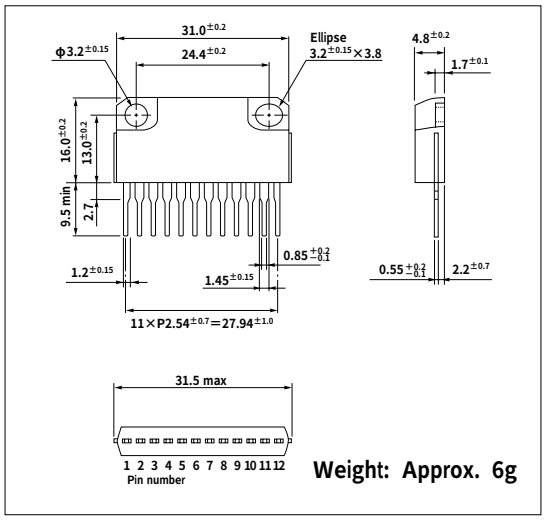
(Ta=25°C)

Parameter	Symbol	NPN	PNP
Collector Cut-off Current	I_{CBO}	10 μA max (V_{CB}=35V)	−10 μA max (V_{CB}=−35V)
Emitter Cut-off Current	I_{EBO}	20mA max (V_{EB}=6V)	−20mA max (V_{EB}=−6V)
Collector-Emitter Voltage	V_{CEO}	35V min (I_C=25mA)	−35V min (I_C=−25mA)
DC Current Gain	h_{FE}	50min (V_{CE}=4V, I_C=3A)	50min (V_{CE}=−4V, I_C=−3A)
Collector-Emitter Saturation Voltage	V_{CE}(sat)	0.5V max (I_C=3A, I_B=100mA)	−0.5V max (I_C=−3A, I_B=−100mA)
Base-Emitter Saturation Voltage	V_{BE}(sat)	1.3V max (I_C=3A, I_B=100mA)	−1.3V max (I_C=−3A, I_B=−100mA)
Diode Forward Voltage	V_F	1.8V max (I_F=2A)	1.8V max (I_F=2A)

☐Equivalent circuit diagram



☐External dimensions (Unit: mm)

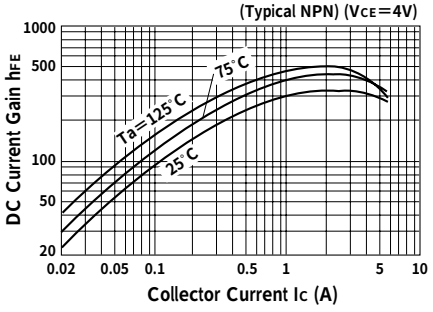


Weight: Approx. 6g

☐Characteristic Curves

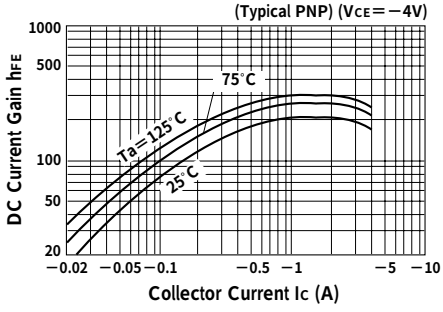
h_{FE}—I_C Temperature Characteristics

(Typical NPN) (V_{CE}=4V)



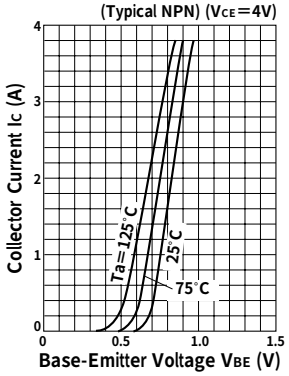
h_{FE}—I_C Temperature Characteristics

(Typical PNP) (V_{CE}=−4V)



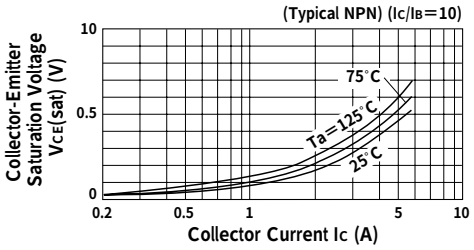
I_C—V_{BE} Temperature Characteristics

(Typical NPN) (V_{CE}=4V)



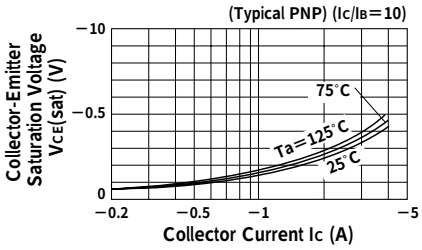
V_{CE}(sat)—I_C Temperature Characteristics

(Typical NPN) (I_C/I_B=10)



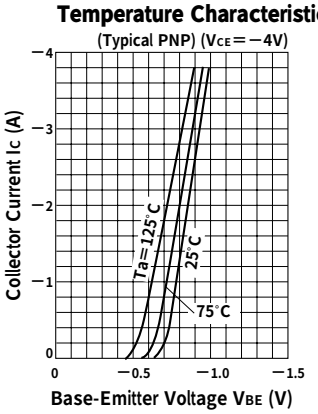
V_{CE}(sat)—I_C Temperature Characteristics

(Typical PNP) (I_C/I_B=10)



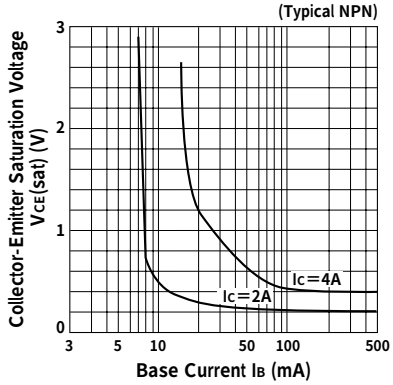
I_C—V_{BE} Temperature Characteristics

(Typical PNP) (V_{CE}=−4V)



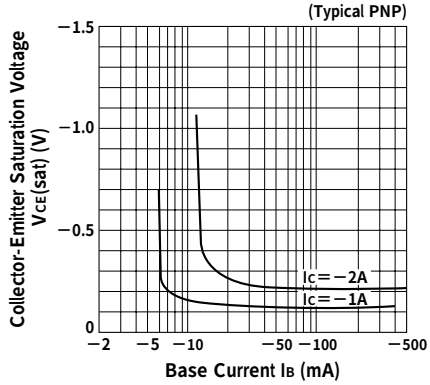
V_{CE}(sat)—I_B Characteristics

(Typical NPN)



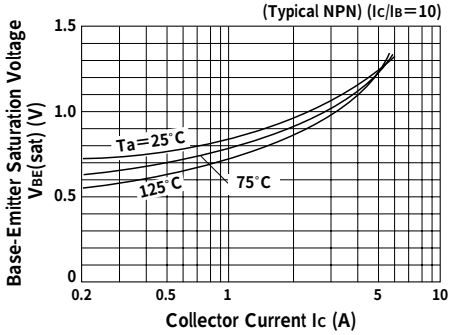
V_{CE}(sat)—I_B Characteristics

(Typical PNP)



V_{BE}(sat)—I_C Temperature Characteristics

(Typical NPN) (I_C/I_B=10)



V_{BE}(sat)—I_C Temperature Characteristics

(Typical PNP) (I_C/I_B=10)