

# SLA4313

**NPN**  
**PNP Silicon Epitaxial Planar**

## Absolute maximum ratings

( $T_a = 25$  )

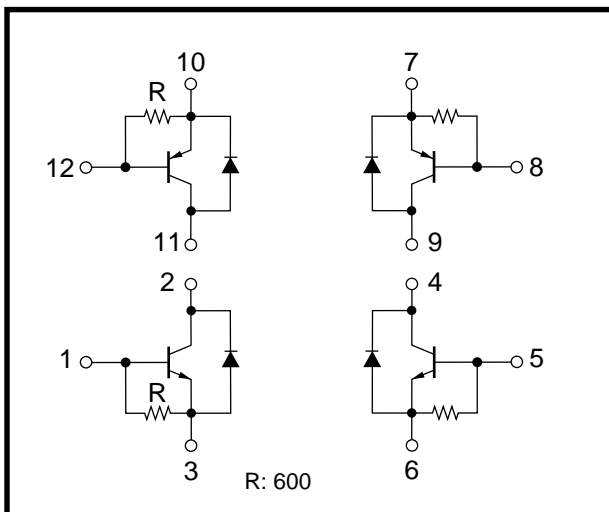
Parameter	Symbol	NPN	PNP	Unit
Collector-Base Voltage	$V_{CB0}$	35	- 35	V
Collector-Emitter Voltage	$V_{CE0}$	35	- 35	V
Emitter-Base Voltage	$V_{EB0}$	6	- 6	V
Collector Current	$I_C$	5	- 5	A
Collector Current	$I_{CP}$	8( $P_w$ 1ms, $D_u$ 50% )		A
Base Current	$I_B$	1	- 1	A
Total Power Dissipation	$P_T$	5( $T_a = 25$ )		W
		25( $T_c = 25$ )		
Isolation Voltage	$V_{ISO}$	1000( Between fin and lead pin, AC )		Vrms
Storage Temperature	$T_{stg}$	- 40 to + 150		

## Electrical characteristics

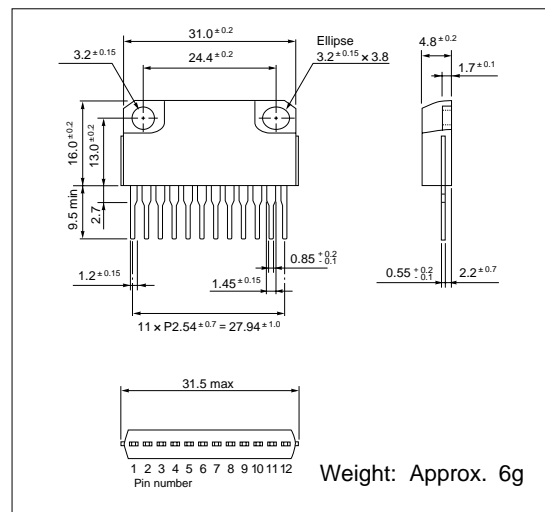
( $T_a = 25$  )

Parameter	Symbol	NPN	PNP
Collector Cut-off Current	$I_{CBO}$	10 $\mu$ A max ( $V_{CB} = 35V$ )	- 10 $\mu$ A max ( $V_{CB} = - 35V$ )
Emitter Cut-off Current	$I_{EBO}$	20mA max ( $V_{EB} = 6V$ )	- 20mA max ( $V_{EB} = - 6V$ )
Collector-Emitter Voltage	$V_{CE0}$	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)



# Characteristic Curves

