

2SD1914

2043A

NPN Epitaxial Planar
Silicon Darlington Transistor

Driver Applications

E2453

Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control

Features

- Darlington connection
- High DC current gain

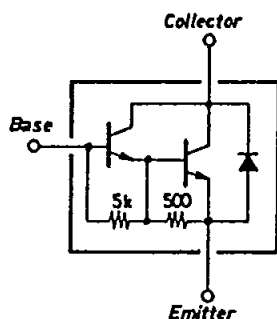
Absolute Maximum Ratings at $T_a=25^{\circ}\text{C}$

			unit
Collector to Base Voltage	V_{CB0}	100	V
Collector to Emitter Voltage	V_{CE0}	80	V
Emitter to Base Voltage	V_{EB0}	6	V
Collector Current	I_C	2	A
Peak Collector Current	i_{cp}	4	A
Collector Dissipation	P_C	1.2	W
	$T_c=25^{\circ}\text{C}$	10	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^{\circ}\text{C}$

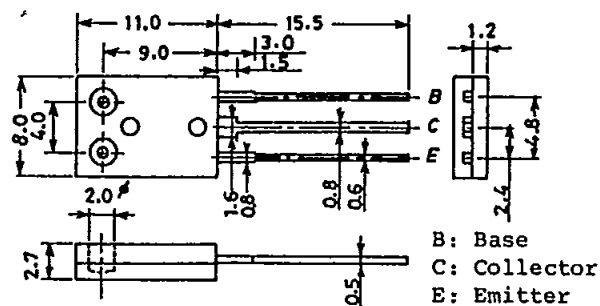
Electrical Characteristics at $T_a=25^{\circ}\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CB0}	$V_{CB}=60\text{V}, I_E=0$			10	μA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=5\text{V}, I_C=0$			2.5	mA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=3\text{V}, I_C=500\text{mA}$	1000			
	$h_{FE}(2)$	$V_{CE}=3\text{V}, I_C=1\text{A}$	2000	30000		
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=1\text{A}, I_B=2\text{mA}$		1.0	1.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=1\text{A}, I_B=2\text{mA}$		1.6	2.0	V
C-B Breakdown Voltage	$V_{(BR)CB0}$	$I_C=100\mu\text{A}, I_E=0$	100			V
C-E Breakdown Voltage	$V_{(BR)CE0}$	$I_C=25\text{mA}, R_{BE}=\infty$	80			V

Electrical Connection



Case Outline 2043A (unit:mm)



SANYO: TO126LP