

**2SD2635****120V / 2A Driver Applications****Applications**

- Motor drivers, hammer drivers, and relay drivers.

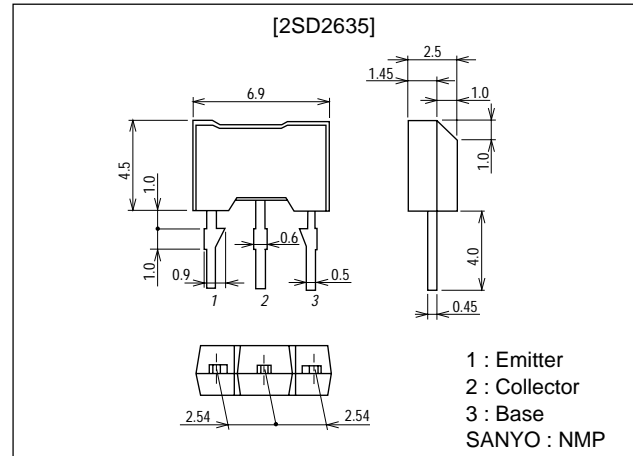
Features

- Darlington connection
- High DC current gain.
- DC current gain is less affected by temperature.

Package Dimensions

unit:mm

2064A

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		120	V
Collector-to-Emitter Voltage	V_{CEO}		120	V
Collector-to-Base Sustain Voltage	$V_{CEO(sus)}$		120	V
Emitter-to-Base Voltage	V_{EBO}		6	V
Collector Current	I_C		2	A
Collector Current (pulse)	I_{CP}		3	A
Collector Dissipation	P_C		1	W
Junction Temperature	T_J		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CB0}	$V_{CB}=100\text{V}, I_E=0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			2.5	mA
DC Current Gain	h_{FE1}	$V_{CE}=3\text{V}, I_C=0.5\text{A}$	1000			
	h_{FE2}	$V_{CE}=3\text{V}, I_C=1\text{A}$	2000		30000	
	h_{FE3}	$V_{CE}=3\text{V}, I_C=0.1\text{A}$	300			

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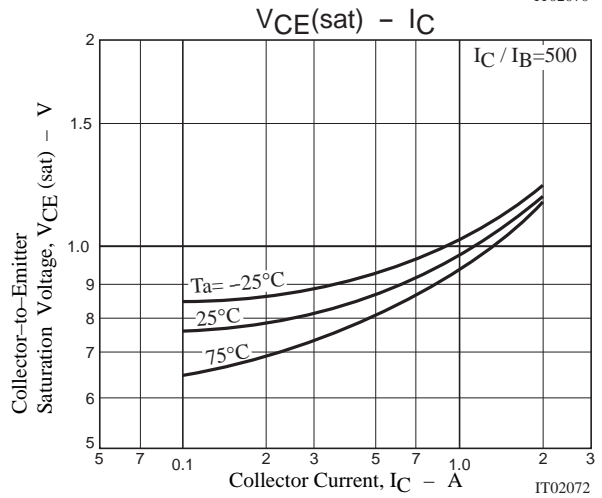
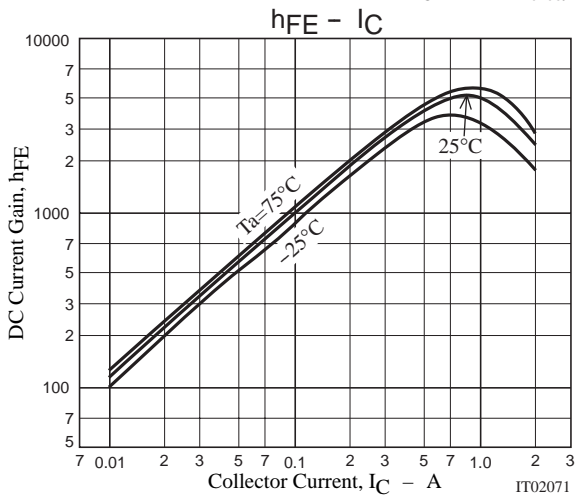
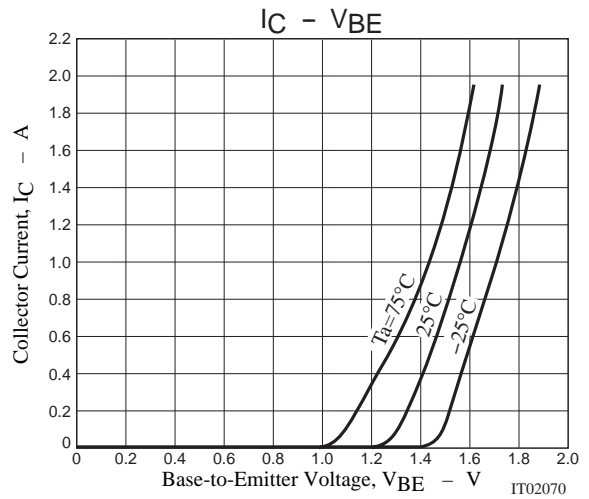
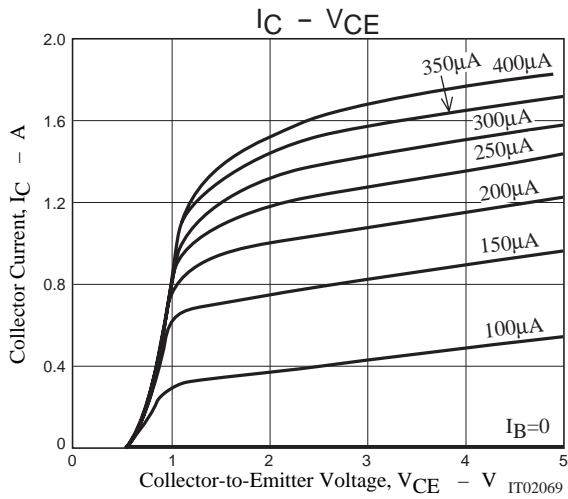
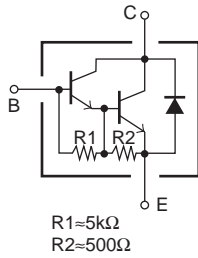
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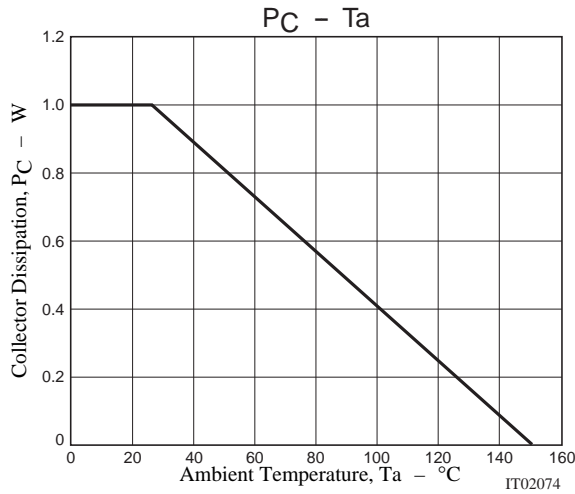
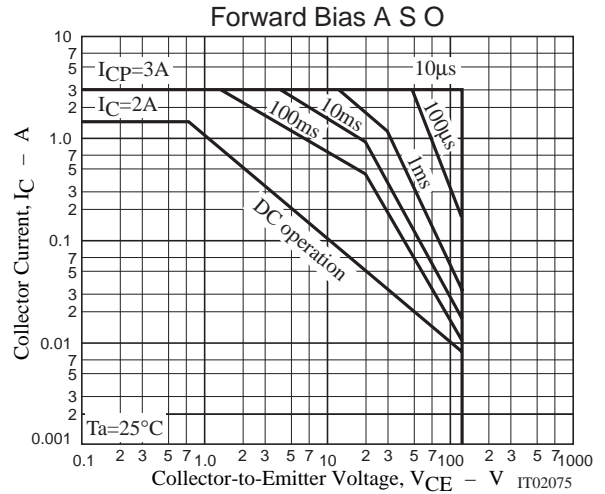
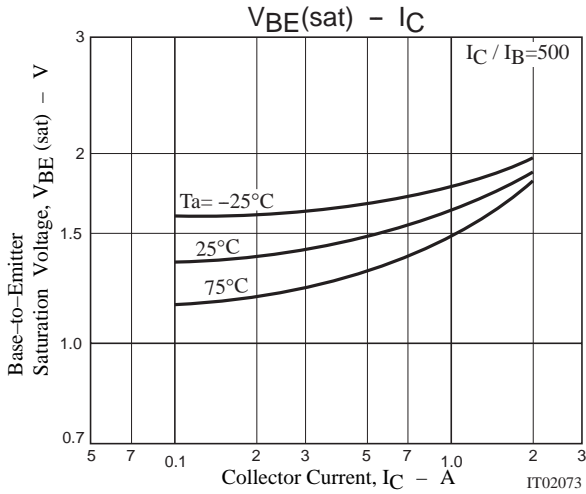
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1A, I_B=2mA$			1.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1A, I_B=2mA$			2.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	120			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, R_{BE}=\infty$	120			V
Collector-to-Emitter Sustain Voltage	$V_{CEO(sus)}$	$I_C=1A, L=10mH, \text{Clamped}$	120			V

Electrical Connection



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