

SANYO	No.3239	2SD2120
	NPN Epitaxial Planar Silicon Transistor General Driver Applications	

Features

- Darlington connection (Contains bias resistance, damper diode)
- High DC current gain
- Less dependence of DC current gain on temperature

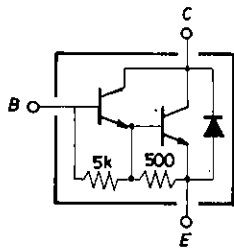
Absolute Maximum Ratings at Ta = 25°C

		unit
Collector to Base Voltage	V_{CB0}	100 V
Collector to Emitter Voltage	V_{CEO}	80 V
Emitter to Base Voltage	V_{EBO}	6 V
Collector Current	I_C	2 A
Collector Current(Pulse)	I_{CP}	4 A
Collector Dissipation	P_C	1 W
Junction Temperature	T_j	150 °C
Storage Temperature	T_{stg}	-55 to +150 °C

Electrical Characteristics at Ta = 25°C

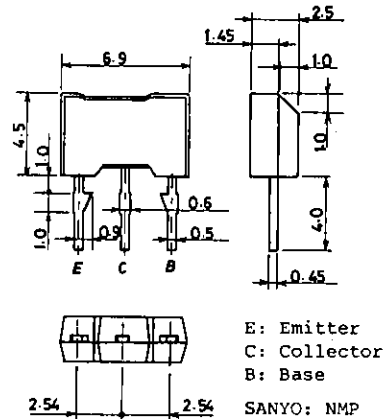
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 60V, I_E = 0$			10	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			2.5	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 3V, I_C = 500mA$	1000			
	$h_{FE(2)}$	$V_{CE} = 3V, I_C = 1A$	2000	7000	30000	
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 1A, I_B = 2mA$		1.0	1.5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 1A, I_B = 2mA$		1.6	2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	100			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10mA, R_{BE} = \infty$	80			V

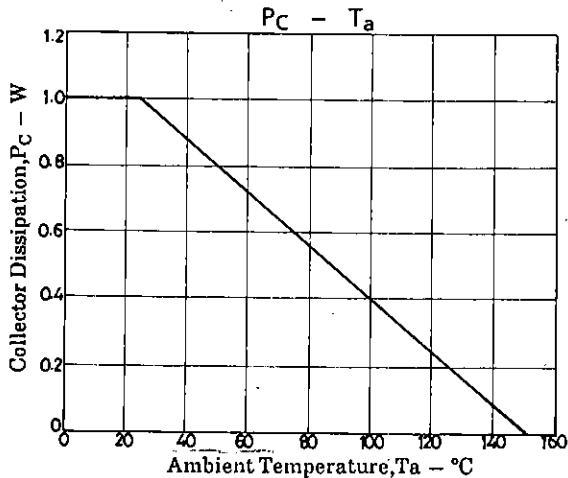
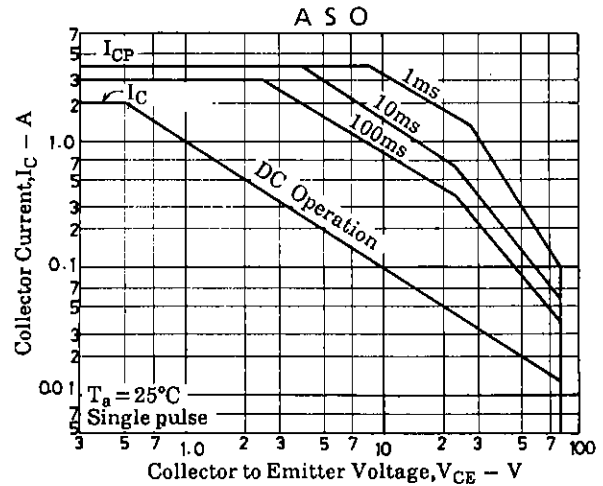
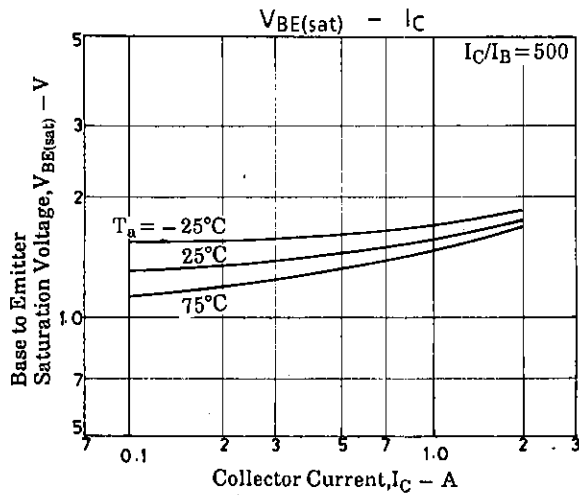
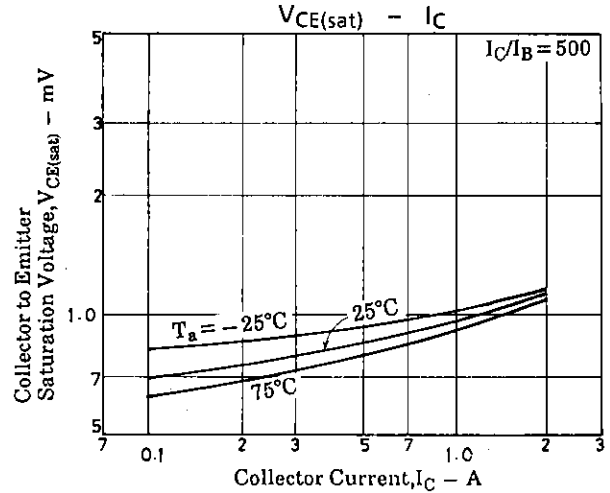
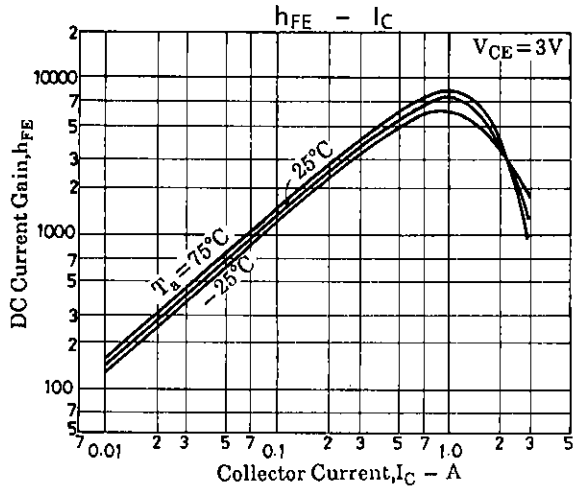
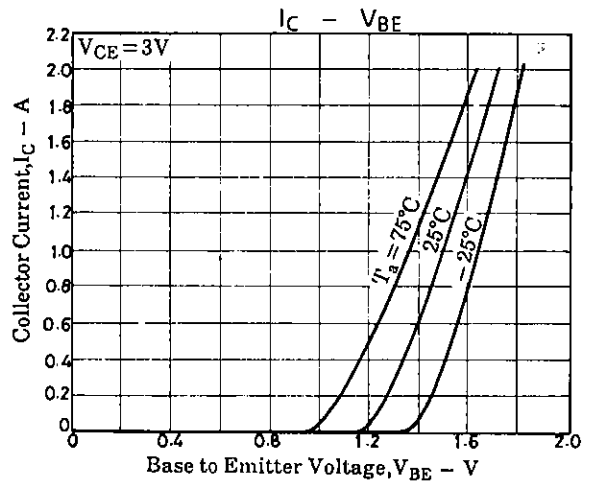
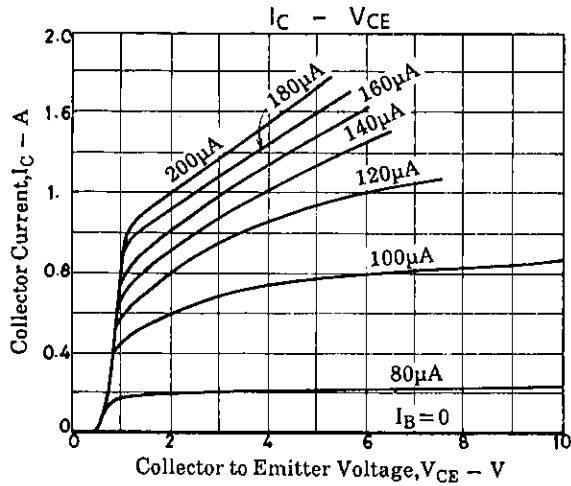
Electrical Connection



Unit (Resistance : Ω)

Package Dimensions 2064
(unit: mm)





- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.