

SANYO	No.2803	2SD2028
	NPN Epitaxial Planar Silicon Transistor	
Low-Frequency Power Amp Applications		

Features

- With Zener diode ($11 \pm 3V$) between collector and base
- Large current capacity
- Low collector to emitter saturation voltage
- Very small-sized package permitting the 2SD2028-applied sets to be made small and slim

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

			unit
Collector to Base Voltage	V_{CB0}	[With Zener diode ($11 \pm 3V$)	8 V
Collector to Emitter Voltage	V_{CEO}		8 V
Emitter to Base Voltage	V_{EBO}		5 V
Collector Current	I_C		0.7 A
Collector Current(Pulse)	I_{CP}		1.5 A
Collector Dissipation	P_C		200 mW
Junction Temperature	T_j		150 $^\circ C$
Storage Temperature	T_{stg}		-55 to +150 $^\circ C$

Electrical Characteristics at $T_a = 25^\circ C$

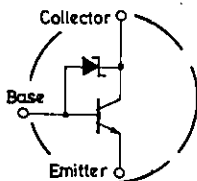
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 6V, I_E = 0$			100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$			100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 2V, I_C = 50mA$	200*		900*	
	$h_{FE(2)}$	$V_{CE} = 2V, I_C = 500mA$	100			
Gain-Bandwidth Product	f_T	$V_{CE} = 2V, I_C = 50mA$		200		MHz
Output Capacitance	c_{ob}	$V_{CB} = 5V, f = 1MHz$		12		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$		50	120	mV
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 100mA, I_B = 10mA$		0.8	1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	8	11	14	V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 100\mu A, R_{BE} = \infty$	8	11	14	V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5			V

*: The 2SD2028 is classified by 50mA h_{FE} as follows:

200	6	400	300	7	600	450	8	900
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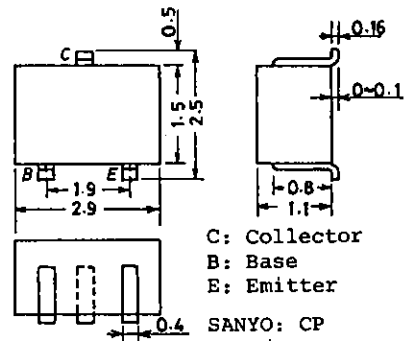
(Note) Marking: LT
 h_{FE} rank: 6,7,8

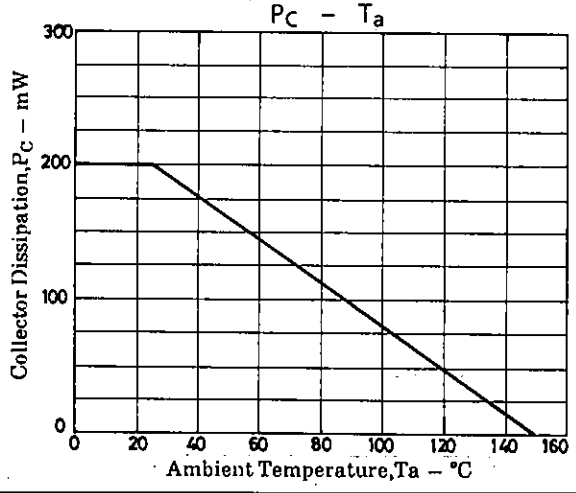
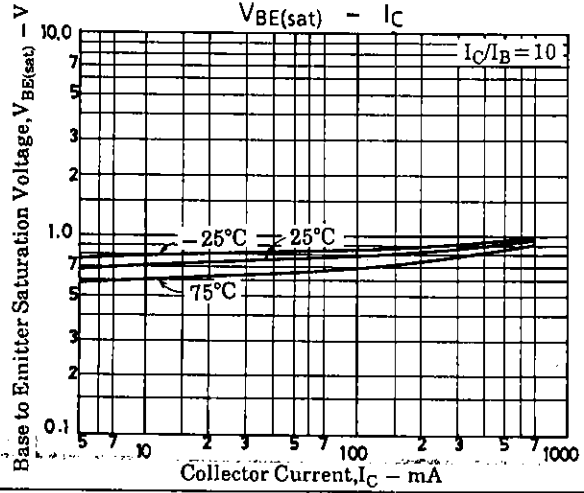
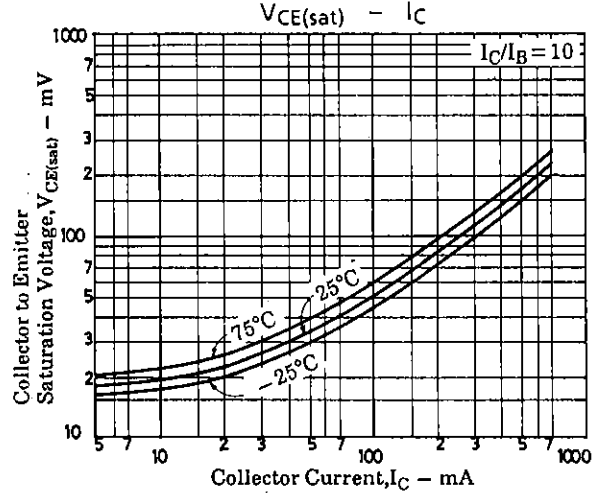
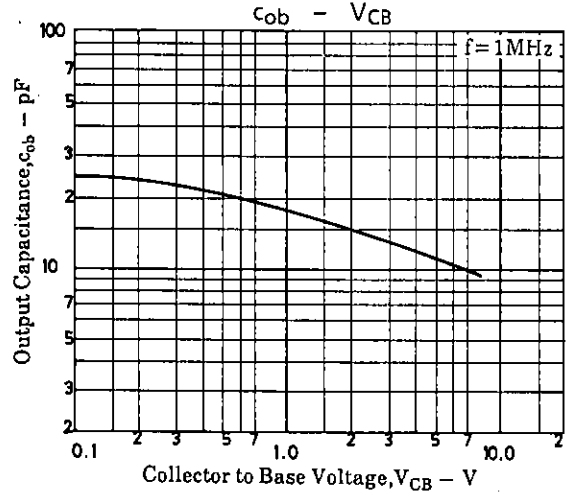
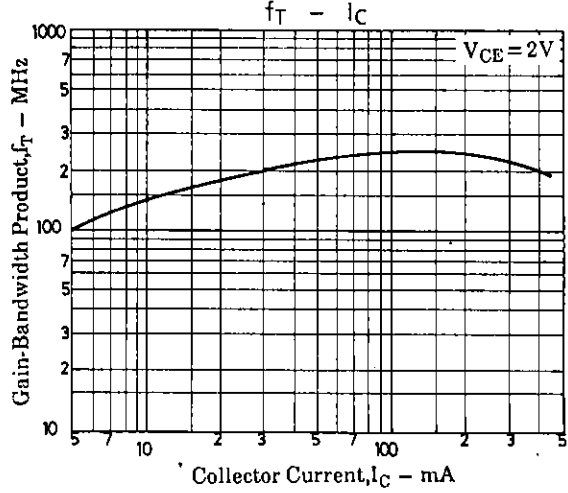
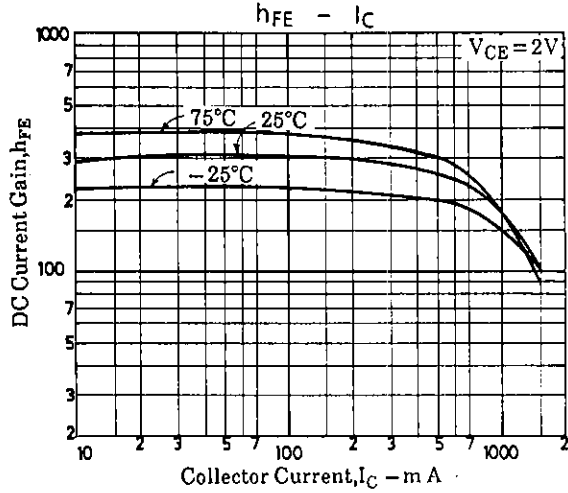
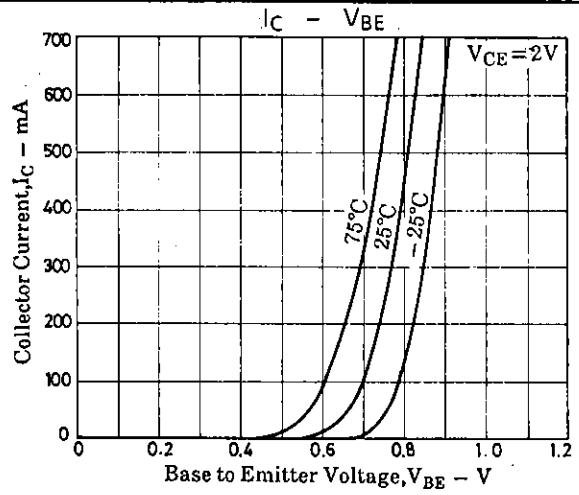
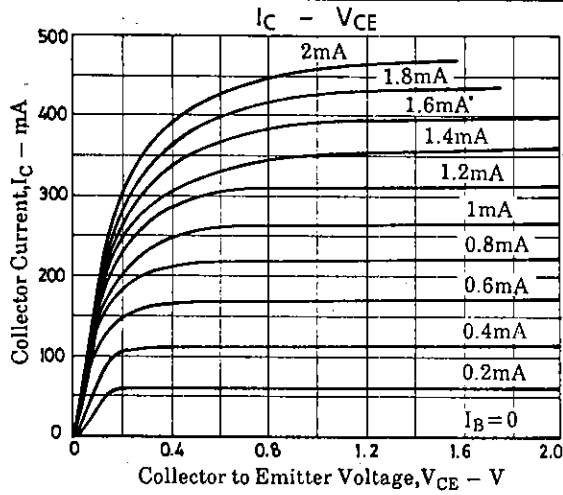
Electrical Connection



Package Dimensions 2018A

(unit: mm)





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