

SANYO	No.2533	2SD1940
	NPN Epitaxial Planar Type Silicon Transistor	
HIGH-VOLTAGE SWITCHING, AF25 TO 30W OUTPUT APPLICATIONS		

Features

- . Micaless package facilitating mounting
- . Wide ASO

Absolute Maximum Ratings at Ta=25°C

Collector-to-Base Voltage	V _{CB0}	100	V	unit
Collector-to-Emitter Voltage	V _{CE0}	85	V	
Emitter-to-Base Voltage	V _{EB0}	6	V	
Collector Current	I _C	6	A	
Peak Collector Current	i _{cp}	10	A	
Collector Dissipation	P _C	25	W	Tc=25°C
Junction Temperature	T _J	150	°C	
Storage Temperature	T _{stg}	-55 to +150	°C	

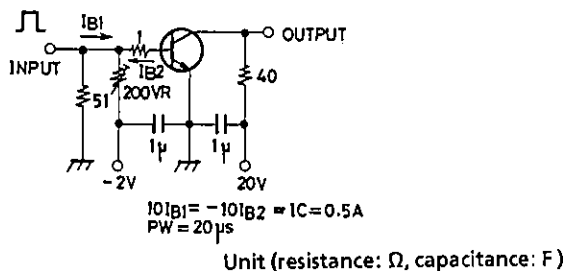
Electrical Characteristics at Ta=25°C

		min	typ	max	unit
Collector Cutoff Current	I _{CB0} V _{CB} =40V, I _E =0			0.1	mA
Emitter Cutoff Current	I _{EB0} V _{EB} =4V, I _C =0			0.1	mA
DC Current Gain	h _{FE} (1) V _{CE} =5V, I _C =1A	60*		320*	
	h _{FE} (2) V _{CE} =5V, I _C =3A	20			
Gain-Bandwidth Product	f _T V _{CE} =5V, I _C =1A		15		MHz
C-E Saturation Voltage	V _{CE(sat)} I _C =4A, I _B =0.4A			2.0	V
Base to Emitter Voltage	V _{BE} V _{CE} =5V, I _C =1A			1.5	V
Output Capacitance	c _{ob} V _{CB} =10V, f=1MHz		110		pF
C-B Breakdown Voltage	V(BR)CBO I _C =5mA, I _E =0	100			V
C-E Breakdown Voltage	V(BR)CEO I _C =5mA, R _{BE} =∞	85			V
E-B Breakdown Voltage	V(BR)EBO I _E =5mA, I _C =0	6			V
Turn-on Time	t _{on} See specified Test Circuit.		0.28		μs
Fall Time	t _f "		0.50		μs
Storage Time	t _{stg} "		3.60		μs

*: The 2SD1940 is classified by 1A h_{FE} as follows:

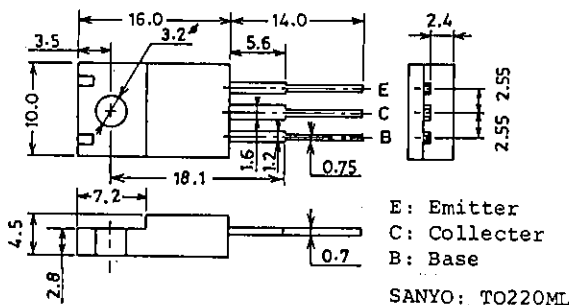
60 D 120	100 E 200	160 F 320
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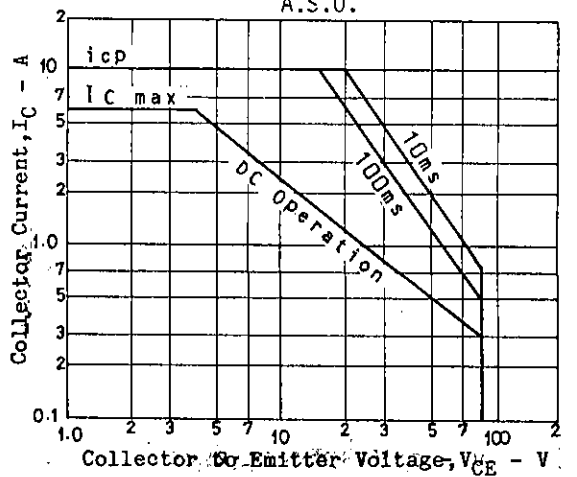
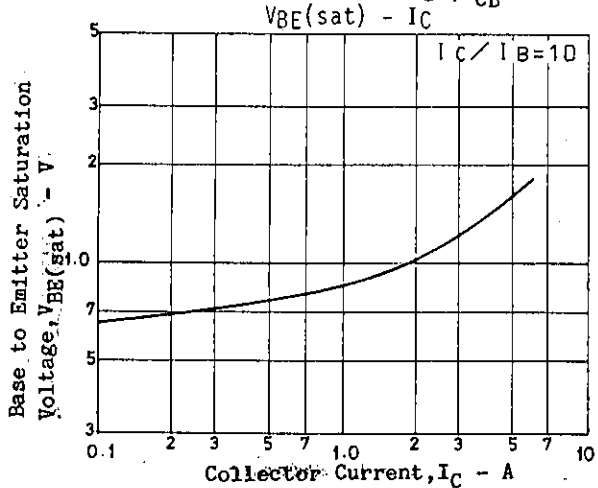
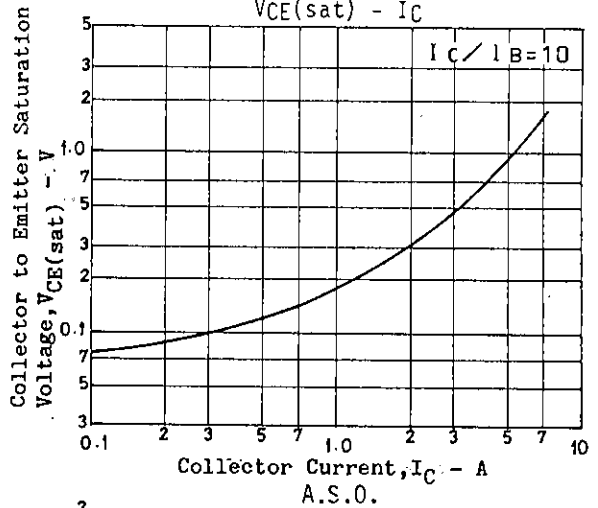
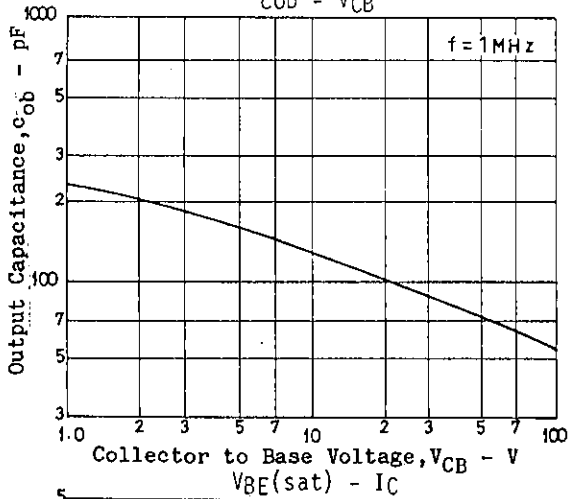
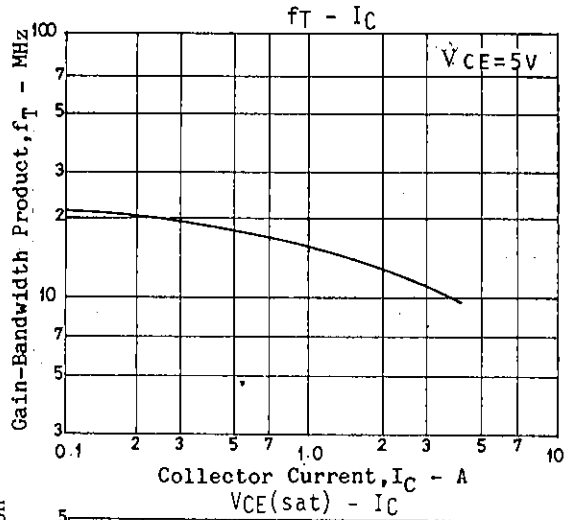
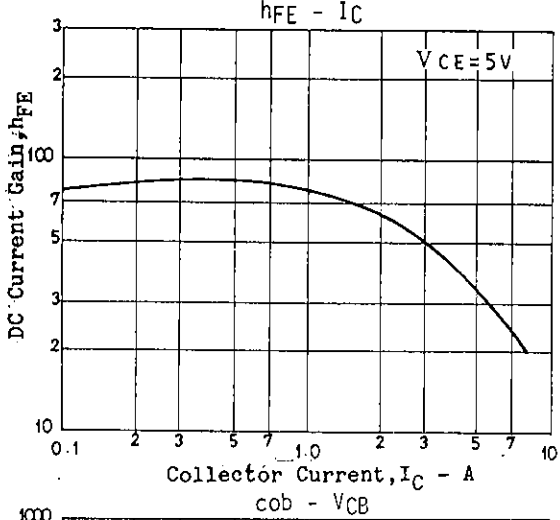
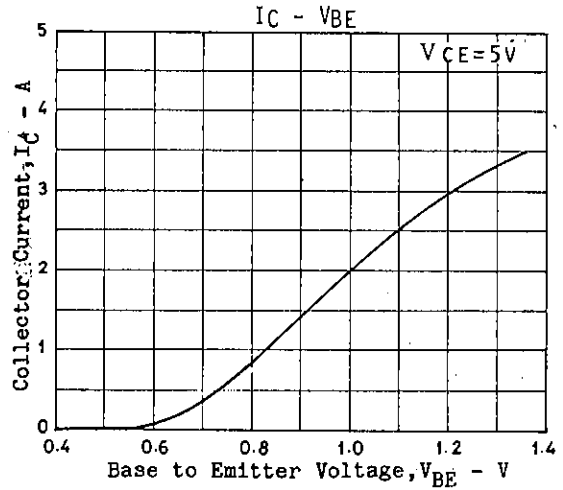
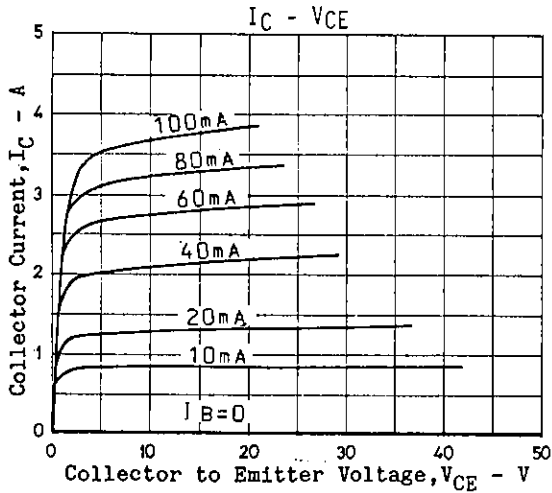
Switching Time Test Circuit

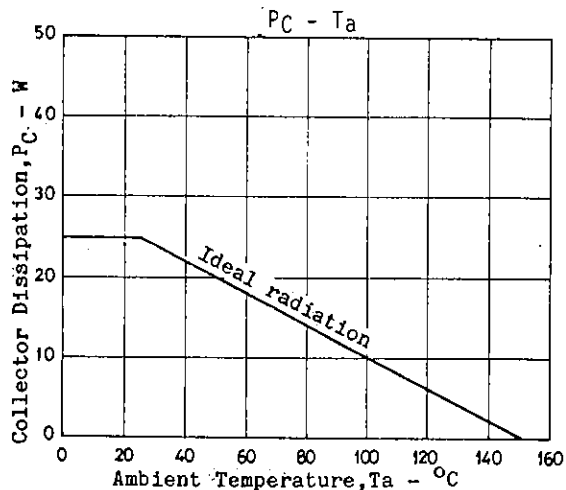


Package Dimensions 2041

(unit:mm)







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