

	No.2549A	<h1 style="margin: 0;">2SD1958</h1> <p style="margin: 0;">NPN Triple Diffused Planar Silicon Transistor</p> <p style="margin: 0;">TV Horizontal Deflection Output, High-Power Switching Applications</p>
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Features

- Excellent t_f permitting efficient drive with less internal dissipation

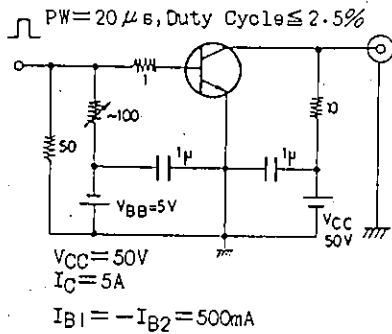
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

			unit
Collector-to-Base Voltage	V_{CBO}	200	V
Collector-to-Emitter Voltage	V_{CEO}	60	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	4.5	A
Peak Collector Current	i_{cp}	10	A
Collector Dissipation	P_C	30	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

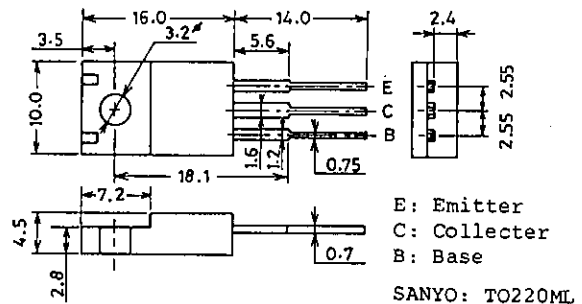
Electrical Characteristics at $T_a=25^\circ\text{C}$

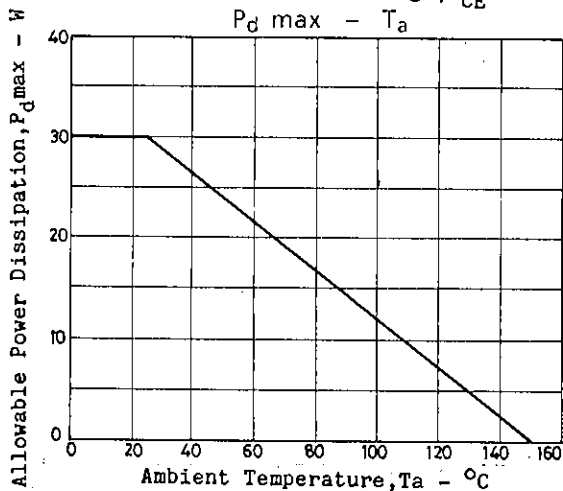
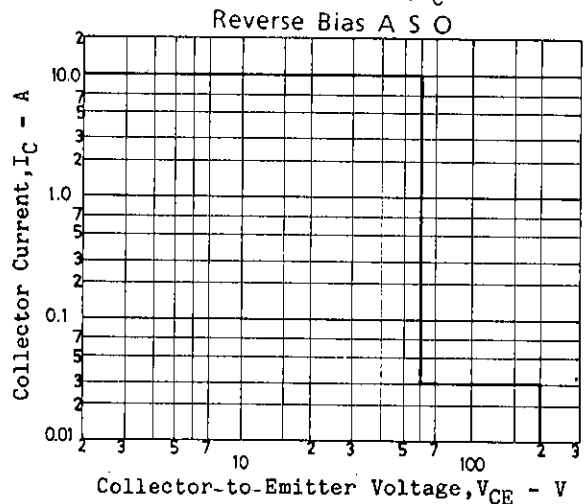
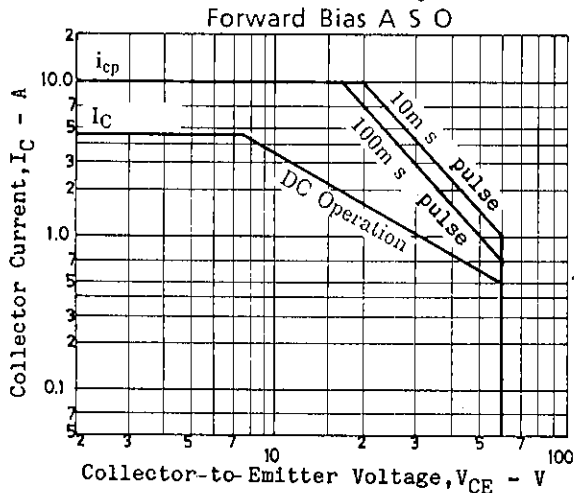
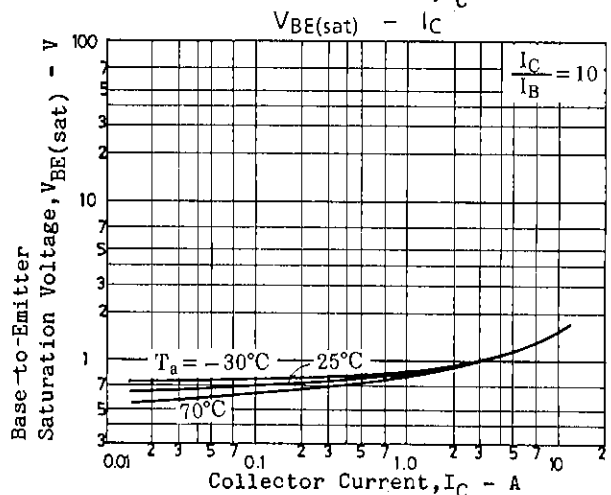
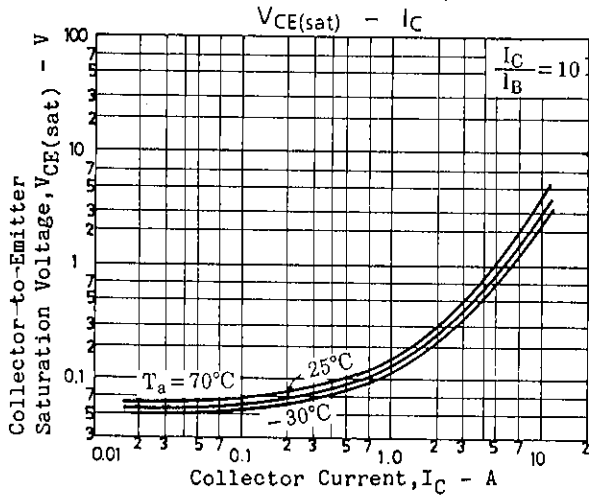
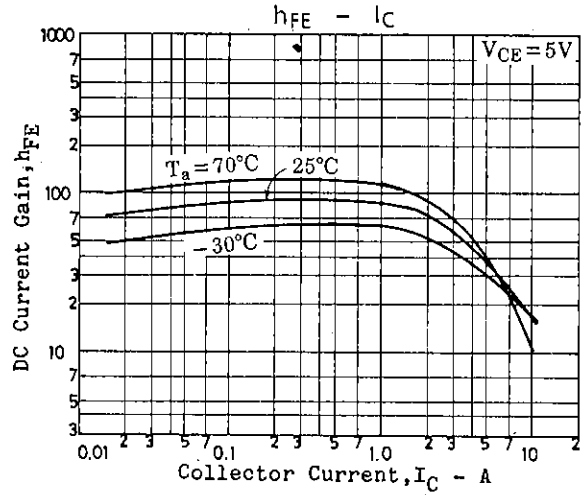
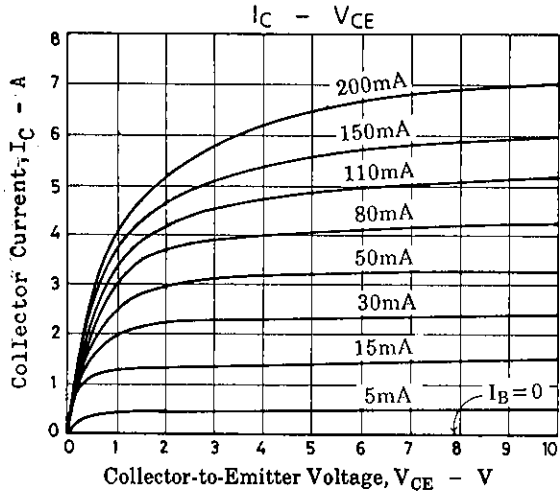
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.1	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=1\text{A}$	30		160	
	$h_{FE(2)}$	$V_{CE}=5\text{V}, I_C=4\text{A}$	25			
Gain-Bandwidth Product	f_T	$V_{CE}=5\text{V}, I_C=1\text{A}$		10		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=4\text{A}, I_B=0.4\text{A}$	0.5		1.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=4\text{A}, I_B=0.4\text{A}$			1.5	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=5\text{mA}, I_E=0$	200			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=5\text{mA}, R_{BE}=\infty$	60			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=5\text{mA}, I_C=0$	6			V
Fall Time	t_f	See specified Test Circuit.	0.2	0.5		μs

Switching Time Test Circuit



Package Dimensions 2041 (unit:mm)





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