

SANYO SEMICONDUCTOR 2SD904

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NPN Triple Diffused Mesa Type Silicon Transistor
For Horizontal Deflection Output of 20" Color TV
(With Damper Diode)

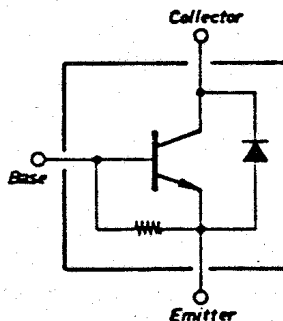
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Collector to Base Voltage	V_{CBO}	1500	V	
Collector to Emitter Voltage	V_{CEO}	600	V	
Emitter to Base Voltage	V_{EBO}	6	V	
Collector Current	I_C	7	A	
Collector Current (Peak)	i_{cp}	10	A	
Collector Dissipation	P_C	3	W	
	P_C	$T_c=25^{\circ}\text{C}$	50	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$	
Storage Temperature	T_{stg}	-40~+150	$^{\circ}\text{C}$	

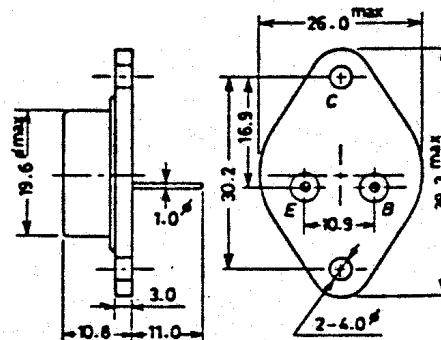
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Collector Cut off Current	I_{CES}	$V_{CB}=1500\text{V}, V_{EB}=0$			1.0	mA
Emitter Cut off Current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$	44		100	mA
Base to Emitter Voltage	V_{BE0}	$I_E=200\text{mA}, I_C=0$	6.0			V
Emitter to Collector Voltage	V_{ECO}	$I_E=4\text{A}, I_B=0$			2.0	V
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5\text{V}, I_C=4\text{A}$	5		10	
	$h_{FE}(2)$	$V_{CE}=5\text{V}, I_C=1\text{A}$	8			
C-E Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=3\text{A}, I_B=0.75\text{A}$			5	V
B-E Saturation Voltage	$V_{BE}(\text{sat})$	$I_C=3\text{A}, I_B=0.6\text{A}$			1.6	V
C-E Sustain Voltage	$V_{CE}(\text{sus})$	$I_C=100\text{mA}, I_B=0, L=35\text{mH}$	600			
Fall Time	t_f	$I_C=3\text{A}, I_B=0.6\text{A}, T_c=80^\circ\text{C}$			1.0	μs

Equivalent Circuit



Case Outline (unit:mm)



EIAJ : TC-3, TB-3
JEDEC: TO-3

C: Collector
E: Emitter
B: Base