

# SANYO SEMICONDUCTOR 2SD904

2SD904

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

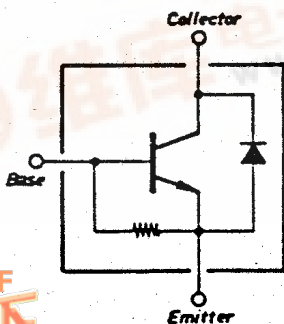
**Absolute Maximum Ratings at Ta=25°C**

Collector to Base Voltage	V <sub>CB0</sub>	1500	V
Collector to Emitter Voltage	V <sub>CE0</sub>	600	V
Emitter to Base Voltage	V <sub>EB0</sub>	6	V
Collector Current	I <sub>C</sub>	7	A
Collector Current (Peak)	i <sub>cp</sub>	10	A
Collector Dissipation	P <sub>C</sub>	3	W
	P <sub>C</sub>	50	W
		T <sub>c</sub> =25°C	
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-40~+150	°C

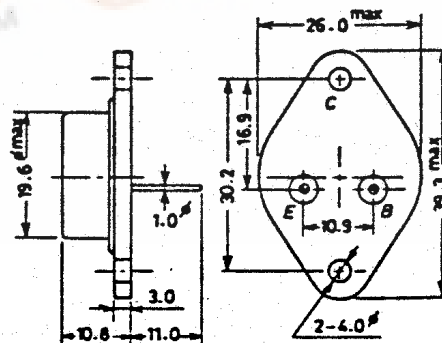
**Electrical Characteristics at Ta=25°C**

		min	typ	max	unit
Collector Cut off Current	I <sub>CES</sub>			1.0	mA
		V <sub>CB</sub> =1500V, V <sub>EB</sub> =0			
Emitter Cut off Current	I <sub>EBO</sub>	44		100	mA
		V <sub>EB</sub> =4V, I <sub>C</sub> =0			
Base to Emitter Voltage	V <sub>BEO</sub>	6.0			V
		I <sub>E</sub> =200mA, I <sub>C</sub> =0			
Emitter to Collector Voltage	V <sub>ECO</sub>			2.0	V
		I <sub>E</sub> =4A, I <sub>B</sub> =0			
DC Current Gain	h <sub>FE</sub> (1)	5		10	
	h <sub>FE</sub> (2)	8			
		V <sub>CE</sub> =5V, I <sub>C</sub> =4A			
		V <sub>CE</sub> =5V, I <sub>C</sub> =1A			
C-E Saturation Voltage	V <sub>CE</sub> (sat)			5	V
		I <sub>C</sub> =3A, I <sub>B</sub> =0.75A			
B-E Saturation Voltage	V <sub>BE</sub> (sat)			1.6	V
		I <sub>C</sub> =3A, I <sub>B</sub> =0.6A			
C-E Sustain Voltage	V <sub>CE</sub> (sus)	600			
		I <sub>C</sub> =100mA, I <sub>B</sub> =0, L=35mH			
Fall Time	t <sub>f</sub>			1.0	μs
		I <sub>C</sub> =3A, I <sub>B</sub> =0.6A, T <sub>c</sub> =80°C			

Equivalent Circuit



Case Outline (unit:mm)



EIAJ : TC-3, TB-3    C: Collector  
JEDEC: TO-3        E: Emitter

