



Silicon NPN Triple Diffused Planar Transistors

2SC5148

Application:

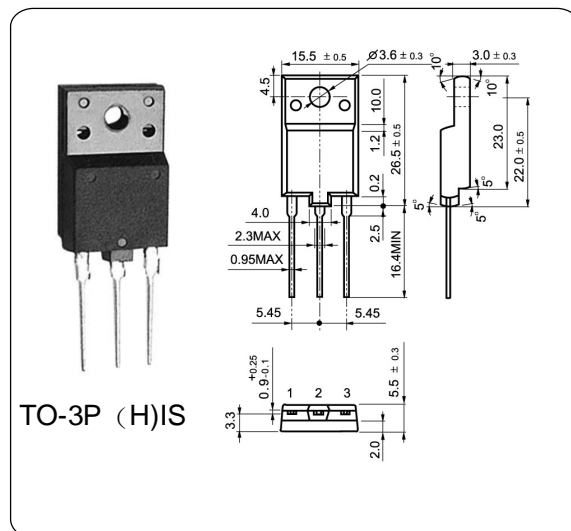
Horizontal deflection output for high resolution display ,color TV.

High speed switching applications



ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	1200	V
Collector-Emitter Voltage	V_{CEO}	700	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	6.0	A
Base Current	I_B	3.0	A
Total Dissipation at	P_{tot}	50	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB} = 1000V, I_E = 0$	—	—	5.0	uA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 6.0V, I_C = 0$	—	—	5.0	uA
Collector-Emitter Sustaining Voltage	V_{CEO}	$I_C = 2.0mA, I_B = 0$	700	—	—	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5.0V, I_C = 1.0A$	10	—	30	
	$h_{FE(2)}$	$V_{CE} = 5.0V, I_C = 5.0A$	5	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 5.0A, I_B = 1.2A$	—	—	2.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 5.0A, I_B = 1.2A$	—	—	1.5	V
Current Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 0.1A$	—	2.0	—	MHz