



### Silicon NPN Triple Diffused Planar Transistors

### 2SC5148

#### Application:

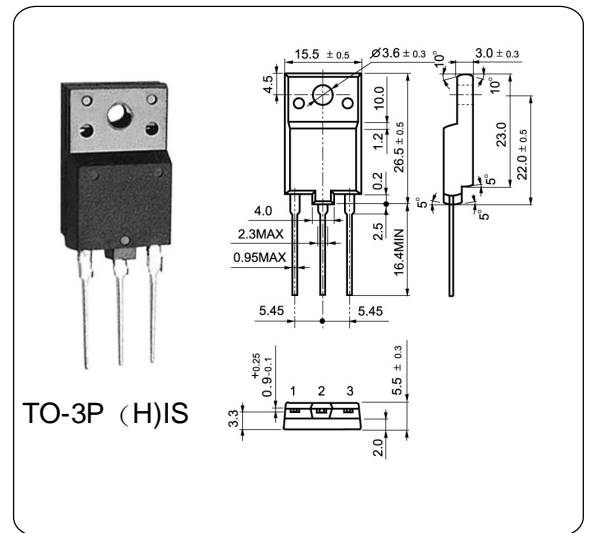
Horizontal deflection output for high resolution display ,color TV.

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