

Transistors for Very High-Definition CRT Display Horizontal Deflection Output Use (3)

Dynamic Focus Use No picture ever out of focus with better focus characteristics

High reliability and high breakdown voltage (HVP technology) make it possible to make the grid voltage higher and the collector capacitance is made small to make high-frequency operation possible.

New outline: a product line of T0-220FI (LS) (full Isolation: Perfect isolation type) is provided and is possible to be changed from T0-220.

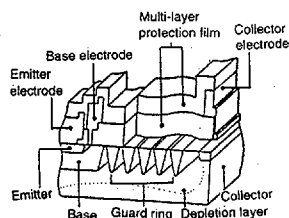
HVP Product features (HVP: High-voltage planar)

In conventional transistor structure, the depletion region expansion required by high withstand voltage operation is unstable. To make the depletion layer expand steadily, diffusion layers (guard rings) of the same conduction type as that of the base layer were made within the collector.

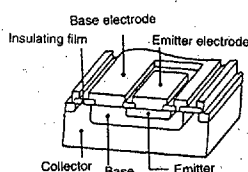
This allows the depletion layer from the base-collector junction to expand with the depletion layers of the guard rings one after the other, resulting in a stable depletion layer cross the collector.

In addition, a multi-layer protection film is added to prevent the withstand voltage level changing due to device status, producing high-reliability devices with high withstand voltages.

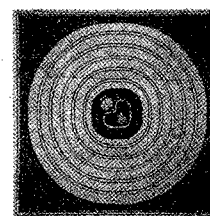
Isometric cross section
HVP (High-voltage planar)



Conventional products



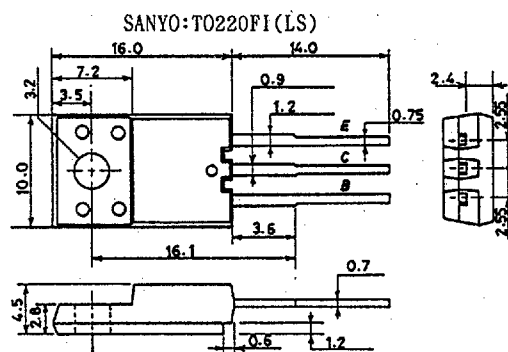
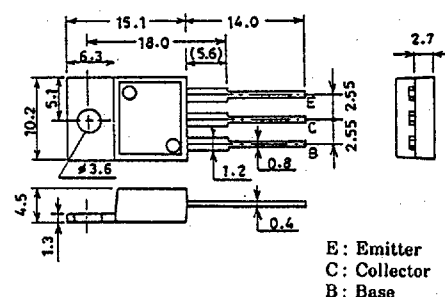
Dynamic focus transistor chip



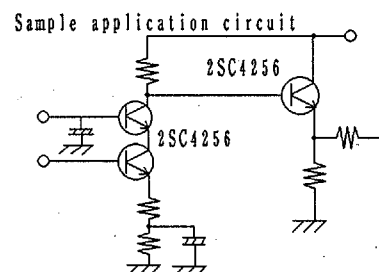
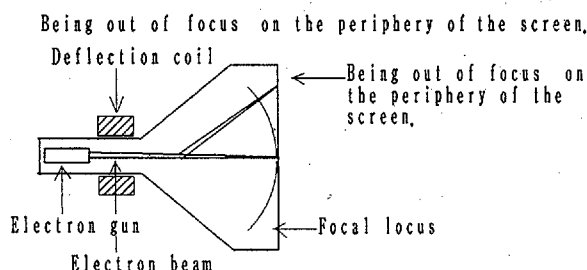
Features *High breakdown voltage *Small Cob *Wide ASO *High reliability
☆:Tc=25°C

Type No.	Package	Absolute Maximum Ratings /Ta=25℃				Electrical Characteristics /Ta=25℃					
		V _{CBO} (V)	V _{CEO} (V)	I _C (A)	P _C (W)	V _{CE} (V)	I _C (mA)	h _{FE} min max	V _{CB} (V)	C _{ob} typ (PF)	
2SC3675 2SC3676	T0-220	1500 1500	900 900	0.1 0.3	☆10 ☆20	5	10 30	min30 min30	100	2.8 5	
2SC4256 2SC4257		1500 1500	1200 1200	10m 30m	1.75 1.75		0.5 1.5	10 ~ 60 10 ~ 60		1.6 2.0	
2SC4450 2SC4451		1500 1500	1500 1500	5m 15m	1.75 1.75		0.2 0.6	10 ~ 60 10 ~ 60		1.5 1.9	
2SC4475 2SC4476		2000 2000	1800 1800	3m 10m	1.75 1.75		0.1 0.3	10 ~ 60 10 ~ 60		1.4 1.8	
2SC4709		2100	2100	10m	1.75		0.5	10 ~ 60		1.3	
2SC4630LS 2SC4631LS		1500 1500	900 900	0.1 0.3	2		10 30	min30 min30		100	2.8 5.0
2SC4632LS 2SC4633LS		1500 1500	1200 1200	10m 30m			0.5 1.5	10 ~ 60 10 ~ 60			1.6 2.0
2SC4634LS 2SC4635LS	1500 1500	1500 1500	10m 20m	0.2 0.6		10 ~ 60 10 ~ 60	1.5 1.9				
2SC4636LS 2SC4637LS	2000 2000	1800 1800	10m 15m	0.1 0.3		10 ~ 60 10 ~ 60	1.4 1.8				
2SC4710LS	2100	2100	10m	0.5		10 ~ 60	1.3				
2SC4887LS 2SC4888LS	2500 2500	1200 1200	0.1 0.3	5 20		10 ~ 60 10 ~ 60	2.5 4.0				

Case Outlines (unit:mm)
SANYO:T0220



A spot size of an electron beam is always kept constant all over the CRT screen by changing a focus of a CRT's electron beam while scanning horizontally and vertically. This eliminates being out of focus of the screen and gives you a very clear image. Thus this technology is indispensable for high definition displays.



These specifications are subject to change without notice.