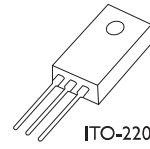


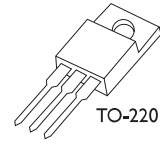
# HIGH VOLTAGE • HIGH SPEED SWITCHING TRANSISTORS

## HDT series

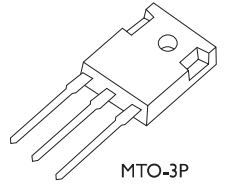
Bipolar transistors (NPN)



ITO-220



TO-220

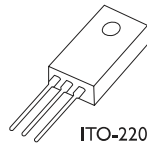


MTO-3P

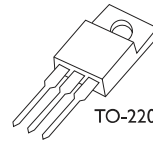
Type No.	Absolute Maximum Ratings								Electrical Characteristics									Outline	
	V <sub>RM</sub>	V <sub>CEO</sub>	V <sub>EB0</sub>	I <sub>C</sub>	I <sub>B</sub>	P <sub>T</sub>	T <sub>stg</sub>	T <sub>J</sub>	V <sub>CEO</sub> (sus) (min)	h <sub>FE</sub> (min)	V <sub>CE</sub> (sat) (max)	V <sub>BE</sub> (sat) (max)	θ <sub>JC</sub> (max)	f <sub>T</sub> (typ)	t <sub>on</sub> (max)	t <sub>s</sub> (max)	t <sub>f</sub> (max)	Package	Figure
	[V]	[V]	[V]	[A]	[A]	[W]	[°C]	[°C]	[V]	(min)	[V]	[V]	[°C/W]	[MHz]	[μs]	[μs]	[μs]		
2SC4310	900	800	7	6	3	50	-55	150	800	7	1.5	2.5	2.5	7	0.5	3	0.5	TO-220	80-3
4311						40							ITO-220					82-4	
4312						80							MTO-3P					86-2	
4313						100													
4314						130													

## HFX series

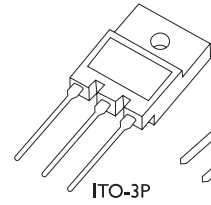
Bipolar transistors (NPN)



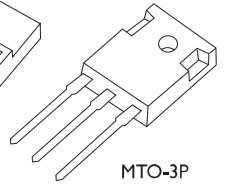
ITO-220



TO-220

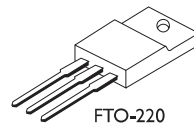


ITO-3P

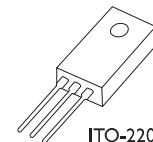


MTO-3P

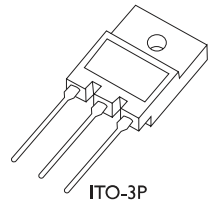
Type No.	Absolute Maximum Ratings								Electrical Characteristics									Outline	
	V <sub>RM</sub>	V <sub>CEO</sub>	V <sub>EB0</sub>	I <sub>C</sub>	I <sub>B</sub>	P <sub>T</sub>	T <sub>stg</sub>	T <sub>J</sub>	V <sub>CEO</sub> (sus) (min)	h <sub>FE</sub> (min)	V <sub>CE</sub> (sat) (max)	V <sub>BE</sub> (sat) (max)	θ <sub>JC</sub> (max)	f <sub>T</sub> (typ)	t <sub>on</sub> (max)	t <sub>s</sub> (max)	t <sub>f</sub> (max)	Package	Figure
	[V]	[V]	[V]	[A]	[A]	[W]	[°C]	[°C]	[V]	(min)	[V]	[V]	[°C/W]	[MHz]	[μs]	[μs]	[μs]		
2SC4230	1200	800	7	2	1	50	-55	150	800	8	1	1.5	2.5	8	0.5	3.5	0.3	TO-220	80-3
4231						30							ITO-220					82-4	
4232						70							MTO-3P					86-2	
4233				60	TO-220	80-3													
4234				45	ITO-220	82-4													
4235				80	MTO-3P	86-2													
4236				100															
4237				150															
4583				3	1	50							2.5					ITO-3P	88-3
4584				6	3	65							1.92						
4585				10	4	85							1.47						



FTO-220



ITO-220



ITO-3P

## Switching Transistors for Lighting Equipment

Bipolar transistors (NPN)

Type No.	Absolute Maximum Ratings								Electrical Characteristics									Outline	
	V <sub>RM</sub>	V <sub>CEO</sub>	V <sub>EB0</sub>	I <sub>C</sub>	I <sub>B</sub>	P <sub>T</sub>	T <sub>stg</sub>	T <sub>J</sub>	V <sub>CEO</sub> (sus) (min)	h <sub>FE</sub> (min)	V <sub>CE</sub> (sat) (max)	V <sub>BE</sub> (sat) (max)	θ <sub>JC</sub> (max)	f <sub>T</sub> (typ)	t <sub>on</sub> (max)	t <sub>s</sub> (max)	t <sub>f</sub> (max)	Package	Figure
	[V]	[V]	[V]	[A]	[A]	[W]	[°C]	[°C]	[V]	(min)	[V]	[V]	[°C/W]	[MHz]	[μs]	[μs]	[μs]		
2SC4940	1200	550	7	4	2	30	-55	150	550	10	1	1.5	4.16	10	0.8	3.0	0.3	ITO-220	82-4
4941	1500	800		6	3	65	150		800	15	0.5		1.92	8	0.5	3.5		ITO-3P	88-3
5382	1200	550		9	6	3	40		150	550	10		1	3.13	—	1.3		4.0	FTO-220