

TO-92 Plastic Package Transistors (NPN)

Maximum Ratings							Electrical Characteristics (Ta=25°C, Unless Otherwise Specified)																		
Type No.	V _{CB0} (V)	V _{CE0} (V)	V _{EB0} (V)	P _D (W)	I _C (A)	I _{CB0} (μA)	V _{CB} (V)	I _{CES} (μA)	V _{CE} (V)	h _{FE}	I _C & V _{CE} (mA)	V _{CE(SAT)} (V)	V _{BE(SAT)} (V)	I _C (mA)	C _{ob} (pF)	f _t (MHz)	t _{on} (ns)	N _F (dB)	Freq (MHz)	C _m (pF)	CDIL Case Style				
	Min	Min	Min	@ Tc=25°C		Max	@ (V)	Max	@ (V)	Min	Max	Max	Max	Max	Typ	Max	Max	Max	Max	Max	Max				
MPS8099	80	80	6	0.625	0.5	0.1	60			100	300	1	5	0.3		100	6	150				TO-92			
										100		10	5												
										75		100	5												
MPS834	40		5	0.625	0.2	0.5	20	0.01	30	25		10	1	0.25		0.9	10	4	350		10	30	TO-92		
												0.4		0.9		50									
MPS918	30	15	3	0.355	0.05	0.01	15			20		3	1	0.4		1	10	1.7			6	60	TO-92		
MPSA05	60	60	4	0.625	0.5	0.1	60			50		10	1	0.25		100							TO-92		
										50		100	1												
MPSA06	80	80	4	0.625	0.5	0.1	80			50		10	1	0.25		100							TO-92		
										50		100	1												
MPSA09	50	50		0.625	0.1	0.1	25			100	600	0.1	5	0.9		10	5	30					TO-92		
MPSA10		40	4	0.625	0.1	0.1	30			40	400	5	10				4	50					TO-92		
*MPSA13	30	\$30	10	0.625	0.5	0.1	30			5		10	5	1.5		100	5	125	200		10	2	0.001	TO-92	
										10		100	5												
MPSA20	40	40	4	0.625	0.1	0.1	30			40	400	5	10	0.25		10	4	125					TO-92		
MPSA42	300	300	6	0.625	0.5	0.1	200			25		1	10	0.5		0.9	20	3	50				TO-92		
										40		10	10												
										40		30	10												
MPSA43	200	200	6	0.625	0.5	0.1	160			25		1	10	0.4		0.9	20	4	50		10		TO-92		
										40		10	10												
										50	200	30	10												
MPSA44	500	400	6	0.625	0.3	0.1	400	0.5	400	40		1	10	0.4		1	7						TO-92		
										50	200	10	10	0.5		0.75	10								
										45		50	10	0.75		50									
										40		100	10												
MPSA45	400	350	6	0.625	0.3	0.1	320	0.5	320	40		1	10	0.4		1	7						TO-92		
										50	200	10	10	0.5		0.75	10								
										45		50	10	0.75		50									
										40		100	10												
MPSH10	30	25	3	0.35		0.1	25			60		4	10	0.5		4	0.7	650				4	TO-92-3		
MPSH11	30	25	3	0.35		0.1	25			60		4	10	0.5		4		650				4	TO-92-3		
MPSH19	30	25	3	0.35		0.1	15			45		4	10				0.7	300				4	TO-92-3		
MPSH20	40	30	4	0.35	0.1	0.05	15			25		4	10				0.7	400				4	TO-92-3		
MPSH24	40	30	4	0.35	0.1	0.05	15			30		8	10				0.4	400				8	TO-92-3		
MPSH30	20	20	3	0.625	0.05	0.05	10			20	200	4	5	3		0.96	10	0.7	300		800	4	6	45	TO-92-3
MPSH31	20	20	3	0.625	0.05	0.05	10			20	200	4	5	0.3		0.96	10	0.7	300		800	4	6	45	TO-92-3
MPSH32	40	30	4	0.625		0.05	10			27	200	4	5	3		1.2	10	0.2	300			4		TO-92-3	
MPSH34	45	45	4	0.35	0.1	0.05	30			15		20	2	0.5		20		0.3	500			15		TO-92-3	
										40		7	15												
MPSH37		40	5	0.35	0.1	0.5	35			25		5	10	0.5		10		0.7	300			5		TO-92-3	
MPSL01	140	120	5	0.625	0.15	1	75			50	300	10	5	0.2		1.2	10	8	60			10		TO-92	
										0.3		1.4	50												
P2N2222	60	30	5	0.625	0.6	0.01	50			35		0.1	10	0.4		1.3	150	8	250			20		100	TO-92-4
										50		1	10	1.6		2.6	500								
										75		10	10												
										50		150	1												
										100	300	150	10												
										30		500	10												

* NOTE : hFE values are K.

\$ V_{CES}