NPN Transistors

'MPS' Device Types

ELECTRICAL CHARACTERISTICS at T_A = 25°C

Device Type	I_C Max. (mA)	$V_{(BR)CBO}$ (V)	$V_{(BR)CEO}$ (V)	$V_{(BR)EBO}$ (V)	I_{CBO} Max. (nA)	I_{CBO} @V_{CB} (V)	DC Current Gain h_{FE} Min.	DC Current Gain h_{FE} Max.	DC Current Gain @I_C (mA)	DC Current Gain @V_{CE} (V)	$V_{CE(sat)}$ Max. (V)	$V_{CE(sat)}$ @I_C (mA)	f_T Min. (MHz)	f_T @I_C (mA)	C_{ob}[1] (pF)	t_s[1] (ns)	NF[1] (dB)	Process
MPS3405C	500	50	50	5.0	100	18	180	540	2.0	4.5	0.3	50	—	—	—	—	—	BBC
MPS3414C	500	25	25	5.0	100	25	75	225	2.0	4.5	0.3	50	—	—	—	—	—	BBC
MPS3415C	500	25	25	5.0	100	25	180	540	2.0	4.5	0.3	50	—	—	—	—	—	BBC
MPS3416C	500	50	50	5.0	100	25	75	225	2.0	4.5	0.3	50	—	—	—	—	—	BBC
MPS3417C	500	50	50	5.0	100	25	180	540	2.0	4.5	0.3	50	—	—	—	—	—	BBC
MPS3563C	50	30	15	2.0	50	15	20	200	8.0	10	—	—	600	8.0	1.7	—	—	DMA
MPS3565C	200	30	25	6.0	50	25	150	600	1.0	10	0.35	1.0	40	1.0	4.0	—	—	BAA
MPS3566C	800	40	30	5.0	50	20	150	600	10	10	1.0	100	40	30	25	—	—	DAC
MPS3567C	800	80	40	5.0	50	40	40	120	150	1.0	0.25	150	60	50	20	—	—	DAC
MPS3568C	800	80	60	5.0	50	40	40	120	150	1.0	0.25	150	60	50	20	—	—	DAC
MPS3569C	800	80	40	5.0	50	40	100	300	150	1.0	0.25	150	60	50	20	—	—	DAC
MPS3642C	500	60	45	5.0	50[2]	50	40	120	150	10	0.22	150	250	50	8.0	—	—	BBC
MPS3646C	300	40	15	5.0	500[3]	20	30	120	30	0.4	0.2	30	350	30	5.0	18	—	BJB
MPS3693C	100	45	45	4.0	50	35	40	160	10	10	—	—	200	10	3.5	—	4.0	FFB
MPS3694C	100	45	45	4.0	50	35	100	400	10	10	—	—	200	10	3.5	—	4.0	FFB
MPS3704C	500	50	30	5.0	100	20	100	300	50	2.0	0.6	100	100	50	12	—	—	BBC
MPS3705C	500	50	30	5.0	100	20	50	150	50	2.0	0.8	100	100	50	12	—	—	BBC
MPS3706C	500	40	20	5.0	100	20	30	600	50	2.0	1.0	100	100	50	12	—	—	BBC
MPS3707C	200	30	30	6.0	100	20	100	400	0.1	5.0	1.0	10	—	—	—	—	5.0	BAA
MPS3708C	200	30	30	6.0	100	20	45	660	1.0	5.0	1.0	10	—	—	—	—	—	BAA
MPS3709C	200	30	30	6.0	100	20	45	165	1.0	5.0	1.0	10	—	—	—	—	—	BAA
MPS3710C	200	30	30	6.0	100	20	90	330	1.0	5.0	1.0	10	—	—	—	—	—	BAA
MPS3711C	200	30	30	6.0	100	20	180	660	1.0	5.0	1.0	10	—	—	—	—	—	BAA
MPS3721C	500	—	—	—	500	18	60	660	2.0	10	—	—	—	—	—	—	—	BBC
MPS3826C	200	60	45	4.0	100	30	40	160	10	10	—	—	200	10	3.5	—	—	BAA
MPS3827C	200	60	45	4.0	100	30	100	400	10	10	—	—	200	10	3.5	—	—	BAA
MPS5127C	100	20	12	3.0	50	10	15	300	2.0	10	0.3	10	—	—	—	—	—	FFB
MPS5131C	200	20	15	3.0	50	10	30	500	10	1.0	1.0	10	—	—	—	—	—	BAA
MPS5132C	200	20	20	3.0	50	10	20	—	10	10	2.0	10	200	10	—	—	—	BAA
MPS5133C	200	20	18	3.0	50	15	60	1000	1.0	5.0	—	—	—	—	—	—	—	BAA
MPS5135C	800	30	25	4.0	300	15	50	600	10	10	1.0	100	40	30	25	—	—	DAC
MPS5136C	800	30	20	3.0	100	20	20	400	150	1.0	0.25	150	40	50	35	—	—	DAC
MPS5137C	800	30	20	3.0	100	20	20	400	150	1.0	0.25	150	40	50	35	—	—	DAC
MPS5172C	500	25	25	5.0	100	25	100	500	10	10	0.25	10	—	—	10	—	—	BBC
MPS5305C	500	25	25	12	100	25	2k	20k	2.0	5.0	1.4	200	60	2.0	10	—	—	TPM
MPS5306C	500	25	25	10	100	25	7k	70k	2.0	5.0	1.4	200	60	2.0	10	—	—	TPM
MPS6512C	200	40	30	4.0	50	30	50	100	2.0	10	0.5	50	—	—	3.5	—	—	BAA
MPS6513C	200	40	30	4.0	50	30	90	180	2.0	10	0.5	50	—	—	3.5	—	—	BAA
MPS6514C	200	40	25	4.0	50	30	150	300	2.0	10	0.5	50	—	—	3.5	—	—	BAA
MPS6515C	200	40	25	4.0	50	30	250	500	2.0	10	0.5	50	—	—	3.5	—	—	BAA
MPS6520C	200	40	25	4.0	50	30	200	400	2.0	10	0.5	50	—	—	3.5	—	3.0	BAA

NOTES:
1) Maximum at typical JEDEC conditions.
2) µA.
3) $V_{(BR)CES}/I_{CES}$, as applicable.
4) mA.
5) $V_{(BR)CER}$ at R = 10Ω.