

USA / European specification models types

[Surface mounting type]

● UMT3 / NPN type

General purpose small signal amplifiers



UMT3 package

Product name	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EB0} Min. (V)	I _C Max. (mA)	I _{CEO} Max. (μV)	@V _{CB} (V)	h _{FE}		@I _C (mA)	@V _{CE} (V)	V _{CE} (sat) Max. (V)	V _{BE} (sat) & Max. (V)	@I _C (mA)	Cob Max. (pF)	f _T Typ. (MHz)	@I _C (mA)	toff Max. (ns)	MARKING	DIE NO.
							Min.	Max.											
BC848BW	30	30	5	100	0.1	30	200	450	2	5	0.6	—	100	3	200	—	—	G1K	C22

● UMT3 / PNP type

General purpose small signal amplifiers



UMT3 package

Product name	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EB0} Min. (V)	I _C Max. (mA)	I _{CEO} Max. (μV)	@V _{CB} (V)	h _{FE}		@I _C (mA)	@V _{CE} (V)	V _{CE} (sat) Max. (V)	V _{BE} (sat) & Max. (V)	@I _C (mA)	Cob Max. (pF)	f _T Typ. (MHz)	@I _C (mA)	toff Max. (ns)	MARKING	DIE NO.
							Min.	Max.											
BC858BW	30	30	5	100	0.1	30	210	480	2	5	0.65	—	100	4.5	250	—	—	G3K	A32

*The minus sign (—) on PNP values has been omitted.

General purpose amplification and switching

Product name	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EB0} Min. (V)	I _C Max. (mA)	I _{CEO} Max. (μV)	@V _{CB} (V)	h _{FE}		@I _C (mA)	@V _{CE} (V)	V _{CE} (sat) Max. (V)	V _{BE} (sat) & Max. (V)	@I _C (mA)	Cob Max. (pF)	f _T Typ. (MHz)	@I _C (mA)	toff Max. (ns)	MARKING	DIE NO.
							Min.	Max.											
UMT2907A	60	60	5	600	100	50	75		0.1	10				8	200	50	180	R2F	A31
							100		1	10	0.4	1.3							
							100		10	10	1.6	2.6	150						
							100 300		150	10			500						
							50		500	10									
UMT3906	40	40	5	200	50 (I _{CE} S)	30	60		0.1	1	0.25	0.85		4.5	250	10	300	R2A	A38
							80		1	1	0.4	0.95	10						
							100 300		10	1			50						
							60		50	1									
							30		100	1									
UMT4403	40	40	5	600	100	35	30		0.1	1	0.4	0.95		8.5	200	20	225	R2T	A31
							60		1	1	0.75	1.3	150						
							100		10	1			500						
							100 300		150	2									
							20		500	2									

*The minus sign (—) on PNP values has been omitted.

General purpose amplification and switching

Product name	BV _{CBO} Min. (V)	BV _{CEO} Min. (V)	BV _{EB0} Min. (V)	I _C Max. (mA)	I _{CEO} Max. (μV)	@V _{CB} (V)	h _{FE}		@I _C (mA)	@V _{CE} (V)	V _{CE} (sat) Max. (V)	V _{BE} (sat) & Max. (V)	@I _C (mA)	Cob Max. (pF)	f _T Typ. (MHz)	@I _C (mA)	toff Max. (ns)	MARKING	DIE NO.
							Min.	Max.											
UMT2222A	75	40	6	600	100	60	35		0.1	10	0.3	1.2		8	250	20	285	R1P	C31
							50		1	10	1.0	2	150						
							75		10	10			500						
							100 300		150	10									
							50		150	1									
UMT3904	60	40	6	200	50 (I _{CE} X)	30	40		0.1	1	0.2	0.85		4	300	10	250	R1A	C37
							70		1	1	0.3	0.95	10						
							100 300		10	1			50						
							60		50	1									
							30		100	1									
UMT4401	60	40	6	600	100	35	20		0.1	1	0.4	0.95		6.5	250	20	225	R2X	C31
							40		1	1	0.75	1.2	150						
							80		10	1			500						
							100 300		150	1									
							40		500	2									

● SST3 · SMT3 / PNP type (cont.)



General purpose amplification and switching

SST3 package

SMT3 package

Product name		BV _{CEO}	BV _{CEO}	BV _{ESD}	I _{CEO}	@V _{CB}	h _{FE}		V _{CE} (sat)		V _{EE} (sat)	@I _C	Cob	f _T	f _{os}	I _C	MARKING	DIE NO.		
Package		Min.	Min.	Min.	Max.		Min.	Max.	Max.	Max.	Max.									
SST3	SMT3	(V)	(V)	(V)	(nA)		(V)	(mA)	(V)	(V)	(mA)								(pF)	(MHz)
SST2222A	MMST2222A	75	40	6	100	60	35	0.1	10	0.3	1.2	150	8	250	20	285	600	R1P	C31	
							50	1	10											
							75	10	10											
							100	150	10											
							50	150	1											
30	500	10																		
SST3904	MMST3904	60	40	6	50 (I _{CEx})	30	40	0.1	1	0.2	0.85	10	4	300	10	250	200	R1A	C37	
							70	1	1											
							100	10	1											
							60	50	1											
							30	100	1											
—	MMST4124	30	25	5	50	20	120	360	2.0	1	0.3	0.95	50	4	300	10	—	200	RZC	C37
SST4401	MMST4401	60	40	6	100	35	20	0.1	1	0.4	0.95	150	6.5	250	20	225	600	R2X	C31	
							40	1	1											
							80	10	1											
							100	150	1											
							100	300	150											1
40	500	2																		

Medium power amplification

Product name		BV _{CEO}	BV _{CEO}	BV _{CEO}	I _{CEO}	@V _{CB}	h _{FE}		V _{CE} (sat)		V _{BE} (sat)	@I _C	Cob	f _r	f _{sw}	I _C	MARKING	DIE NO.	
Package		Min.	Min.	Min.	Max.		Min.	Max.	@I _C	@V _{CE}	Max.								Max.
SST3	SMT3	(V)	(V)	(V)	(nA)	(V)			(V)	(V)	(mA)	(mA)	(pF)	(MHz)	(ns)	(mA)			
SSTA05	—	60	60	4	100	60	100	10	1	0.25	1.2 (V _{BE(ON)})	100		100	10		500	R1H	D16
SSTA06	MMSTA06	80	80	4	100	80	100	10	1	0.25	1.2 (V _{BE(ON)})	100		100	10		500	R1G	D16

Darlington pair type

Product name		BV _{CEO}	BV _{CEO}	BV _{ESD}	I _{CEO}	@V _{CB}	h _{FE}		V _{CE} (sat)		V _{BE} (sat)	@I _C	Cob	f _r	NF	I _C	MARKING	DIE NO.	
Package		Min.	Min.	Min.	Max.		Min.	Max.	@I _C	@V _{CE}	Max.								Max.
SST3	SMT3	(V)	(V)	(V)	(nA)		(V)	(V)	(V)	(V)	(V)								(V)
SST6427	—	40	40	12	50	30	10 20 14	100 200 140	10 100 500	5 5 5	1.2 1.5	50 2 500	7			10	500	R1J	D25
SSTA13	MMSTA13	(V _{CE}) 30		10	100	30	5 10		10 100 5	5 5	1.5	100	10	125	10		500	R1M	D25
SSTA14	MMSTA14	(V _{CE}) 30		10	100	30	10 20		10 100 5	5 5	1.5	100	10	125	10		500	R1N	D25
SSTA28	MMSTA28	(V _{CE}) 80		12	100	60	10 10		10 100 5	5 5	1.5	100	8	125	10		500	RAT	D69

High frequency applications

Product name Package		BV _{CEO}	BV _{CEO}	BV _{CEO}	I _{CEO}	@V _{CE}	h _{FE}		V _{CE} (sat)		V _{BE} (sat)	@I _C	Cob	f _r	NF	I _C	MARKING	DIE NO.		
		Min.	Min.	Min.	Max.		Min.	Max.	Max.	Max.	Max.			Max.		(mA)			(dB)	Max.
SST3	SMT3	(V)	(V)	(V)	(nA)	(V)	Min.	Max.	@I _C	@V _{CE}	(V)	(mA)	(pF)	(MHz)		(mA)				
SST8245	—	30	20	3	100 (I _{CES})	18	60	150	2.5	4	0.4	1	10	1.2	600	2.5	50	R3B	C33	
—	MMST918	30	15	3	100	15	20		3	1	0.4	1	10	1.7	600	4	6	50	RVX	C33

● SST3 / PNP type



General purpose amplification and switching (cont.)

SST3 package

SMT3 package

Product name		BV _{CEO}	BV _{CEO}	BV _{CEO}	IC _{BO}	@V _{CB}	h _{FE}		V _{CE} (sat)		V _{BE} (sat)	@I _C	Cob	f _r		t _{off}	I _C	MARKING	DIE NO.
Package		Min.	Min.	Min.	Max.		Min.	Max.	Max.	Max.	Max.			Min.	@I _C	Max.			
SST3	SMT3	(V)	(V)	(V)	(nA)	(V)			(V)	(V)	(V)	(mA)	(pF)	(MHz)	(mA)	(ns)	(mA)		
SST3906	MMST3906	40	40	5	50 (I _{CES})	30	60		0.1	1		10 50	4.5	250	10	300	200	R2A	A38
							80		1	1									
							100	300	10	1	0.25								
							60		50	1	0.4								
							30		100	1	0.95								
—	MMST4126	25	25	4	50	20	120	360	2	1		50	4.5	250	10		200	RVZ	A38
							60		50	1	0.4								
							30		0.1	1									
							60		1	1									
							100		10	1	0.4								
SST4403	MMST4403	40	40	5	100	35	100		0.4	0.95		150 500	8.5	200	20	255	600	R2T	A31
							100	300	0.75	1.3									
							100		150	2									
							20		500	2									

• The minus sign (—) on PNP values has been omitted.

Medium power amplification

Product name		BV _{CEO}	BV _{CEO}	BV _{CEO}	IC _{BO}	@V _{CB}	h _{FE}		V _{CE} (sat)		V _{BE} (sat)	@I _C	Cob	f _r		t _{off}	I _C	MARKING	DIE NO.
Package		Min.	Min.	Min.	Max.		Min.	Max.	Max.	Max.	Max.			Min.	@I _C	Max.			
SST3	SMT3	(V)	(V)	(V)	(nA)	(V)			(V)	(V)	(V)	(mA)	(pF)	(MHz)	(mA)	(ns)	(mA)		
SSTA56	MMSTA56	80	80	4	100	80	100		10	1	0.25	100		50	100		500	R2G	B93
							100		100	1	1.2								

• The minus sign (—) on PNP values has been omitted.

Darlington pair type

Product name		BV _{CEO}	BV _{CEO}	BV _{CEO}	IC _{BO}	@V _{CB}	h _{FE}		V _{CE} (sat)		V _{BE} (sat)	@I _C	Cob	f _r		NF	I _C	MARKING	DIE NO.
Package		Min.	Min.	Min.	Max.		Min.	Max.	Max.	Max.	Max.			Min.	@I _C	(dB)			
SST3	SMT3	(V)	(V)	(V)	(nA)	(V)			(V)	(V)	(V)	(mA)	(pF)	(MHz)	(mA)		(mA)		
—	MMSTA64	30	30 (V _{CE})	10	100	30	10k		10	5	1.5	100	7	125	10	3	300	R2V	B25
							20k		100	5									

• The minus sign (—) on PNP values has been omitted.



● MPT3 / NPN type

MPT3 package

Application	Product name	V _{CEO}	I _C	P _C	f _r	Cob	h _{FE}	MARKING	DIE NO.
		(V)	(A)	(W)★	(MHz)	(pF)			
Driver	BCX56	80	1	1	100	20	40~250	DF	D54

★ On 14×18×0.7mm ceramic board.



● MPT3 / PNP type

MPT3 package

Application	Product name	V _{CEO}	I _C	P _C	f _r	Cob	h _{FE}	MARKING	DIE NO.
		(V)	(A)	(W)★	(MHz)	(pF)			
Driver	BCX53	80	1	1	100	20	40~250	BE	B54

• The minus sign (—) on PNP values has been omitted.

★ On 14×18×0.7mm ceramic board.