

SELECTION GUIDE BY FUNCTION

Type No.	Applications					Features										Max. Rating		PKG Outline
	Frequency Band	Function	Set Power (W)	Use		f	P <sub>o</sub>	G <sub>P</sub>	$\eta$ t	P <sub>in</sub>	V <sub>cc</sub>	V <sub>BB</sub>	$\rho$ in	2fo	3fo	V <sub>cc</sub>	P <sub>o</sub>	
				M	P	MHz	W	dB	%	mW	V	V	-	dBc	dBc	V	W	
<b>M67755L</b> *4 <b>M67755H</b> *4	VHF 140 MHz	FM	5		○	135~150 150~175	7	35.4	40	2	7.2	5	2.5	-25	-30	9	10	H12
<b>M67748L/LR</b> *5 <b>M67748H/HR</b> *5 <b>M67748UH</b> *5		FM	5		○	135~150 150~175 220~225	7	25.4	40	20	12.5	5	2.5	-20	-25	15	9	H27
<b>M67798L</b> **		FM	5		○	144~148	7	25.4	50	20	9.6	3.5	3	-25	-30	16	10	*1
<b>M67704</b> *6		FM	10	○		142~175	13	28.1	40	20	12.5	5	2.5	-20	-30	16	20	H16
<b>M67741L</b> *7 <b>M67741H</b> *7		FM	25	○		135~150 150~175	30	21.7	40	200	12.5	-	3.3	-25	-30	17	35	H2
<b>M67781L</b> <b>M67781H</b>		FM	35	○		135~160 150~175	40	21.2	40	300	12.5	-	3	-30	-30	16	50	H2
<b>M68702L</b> ** <b>M68702LR</b> ** <b>M68702H</b> **		FM	50	○		135~160 135~160 150~160	60	23.0	40	300	12.5	-	3	-30	-30	17	70	H2
<b>M67799M</b> **	UHF 400 MHz	FM	5		○	430~450	7	25.4	45	20	9.6	3.5	3	-25	-30	16	10	*1
<b>M67749GL</b> ** <b>M67749EL</b> ** <b>M67749SLR</b> <b>M67749SL</b> ** <b>M67749ULR</b> <b>M67749LRI</b> ** <b>M67749L/LR</b> <b>M67749M/MR</b> <b>M67749H/HR</b> <b>M67749UH**/UHR</b> <b>M67749SH/SHR</b> **		FM	5		○	326~346 335~360 335~360 350~370 360~390 390~420 400~430 430~450 440~470 470~490 490~512	7	25.4	35	20	12.5	5	2.5	-20	-25	15	10	H27
<b>M67729L2</b>		FM	15	○		400~420	20	21.2	35	150	12.5	-	2.8	-30	-30	16	30	H18
<b>M57786L</b> <b>M57786H</b> <b>M57786UH</b> <b>M57786SH</b>		FM	35	○		400~430 450~470 470~490 490~512	40	21.2	40	300	12.5	-	3.5	-30	-30	17	50	H3
<b>M66703M</b> **		FM	50	○		430~450	60	23.0	40	300	12.5	-	3	-30	-30	17	70	H3

Note. \*\* Under development. M: for MOBILE, P: for PORTABLE. PKG outline: see references "Package outline".  
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- \* 1: MOSFET 30 × 10mm
- \* 2: 6pin type
- \* 3: MCA Handy
- \* 4: High gain type to M57785 series
- \* 5: High gain, small package type to M57732, M57796 series
- \* 6: High gain, small package type to M57719
- \* 7: Wide band to M57741 series

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Type No.	Applications			Features								Max. Rating		PKG Outline
	Frequency Band	Function	Set Power (W)	f	P <sub>o</sub>	P <sub>in</sub>	V <sub>oP</sub>	$\eta$ t	$\rho$ in	2fo	3fo	V <sub>cc</sub>	P <sub>o</sub>	
				MHz	W	mW	V	%	-	dBc	dBc	V	W	
<b>M67729L2</b> <b>M67729H2</b> <b>M57734</b>	400MHz	FM	15	400~420	20	150	12.5/12.5	35	2.8			16	30	H18
450~460				20	150	12.5/12.5	35	2	-30	-30	16	30	H18	
453~458				25	300	12.5/12.5/12.5	40	2.5			17	35	H3	
<b>M57782</b> <b>M67754</b> <b>M57739C</b>	AMPS	FM	3	324~849	7	1	8/8/12.5	35	2.8	-30	-30	17	10	H11
324~849				6	1	8/8/12.5	10							H11
324~849				6	30	12.5/12.5	12							H26
<b>M67724</b>		FM	0.6	324~849	1.6	1	7.2/7.2/7.2					9	3	H25
<b>M67717</b> <b>M67759</b>	ETACS	FM	3	872~905	7	1	8/8/12.5	35	2.8	-30	-30	17	10	H11
872~905				6	1	8/8/12.5								
<b>M57791</b>	TACS	FM	3	890~915	7	1	8/8/12.5	35	2.8	-30	-30	17	10	H11
<b>M57789</b> <b>M67769C</b>	NMT900	FM	6	890~915	12	5	12.5/8/12.5	30	2.8	-30	-30	17	20	H3
890~915				13	1	8/8/12.5	18							H3
<b>M67747A</b>	DDI	FM	3	898~925	7	1	8/8/12.5	35	2.8	-30	-30	17	10	H11
<b>M67764</b> <b>M67790</b>	CRP	FM	4	940~960	8	2	8/12.5/12.5	35	2.8	-30	-30	17	10	H11
945~951				4	1	6/8/8	30							
<b>M67766A</b>	D-AMPS	PSK	3	824~849	6	2	8/8/8/12.5	20	3	-30	-30	15.5	10	H3 * 8

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\* 8 : 8pin type

## SELECTION GUIDE BY FUNCTION

Type No.	Applications				Features											Max. Rating		PKG Outline
	Frequency Band	Function	Set Power (W)	Use		f MHz	P <sub>o</sub> W	G <sub>p</sub> dB	$\eta$ t %	P <sub>in</sub> mW	V <sub>cc</sub> V	V <sub>BB</sub> V	$\rho$ in -	2fo dBc	3fo dBc	V <sub>cc</sub> V	P <sub>o</sub> W	
				M	P													
M57735	VHF6m	SSB	10	○		50~54	19	19.7	40	200	12.5	9	2.2	-25	-30	17	25	H3
M67743L M67743H	VHF MID	FM	5		○	68~81 77~88	7	23.6	38	30	12.5	5	4	-18	-25	15	10	H13
M67742	BAND	FM	25	○		68~88	30	17.7	40	500	12.5	-	3	-25	-30	17	40	H2
M57785L M57785M M57785H	VHF 140 MHz	FM	5		○	135~150 150~162 162~174	7	21.4	40	50	7.2	5	2.5	-20	-30	10	10	H12
M67755L * 9 M67755H * 9						135~150 150~175	7	35.4	40	2	7.2	5	2.5	-25	-30	9	10	H12
M57783L M57783H		FM	5		○	135~160 150~175	7	21.4	45	50	7.5	5	2.5	-20	-30	9	10	H13
M67710L M67710H		FM	5		○	135~160 150~175	7	21.4	40	50	9.6	5	2.5	-20	-30	16	10	H13
M57796MA M57796L M57796H		FM	5		○	144~148 135~150 150~175			15.4 13.6	200 50 300						16	10	H14
M57732L M57732		FM	5		○	135~160 144~175	7	25.4	40	20	12.5	5	2.5	-20	-30	16	10	H12
M67748L * 10 M67748LR * 10 M67748H * 10 M67748HR * 10		FM	5		○	135~150 135~150 150~175 150~175	7	25.4	40	20	12.5	5	2.5	-20	-25	15	9	H27 H27R H27 H27R
M57706L M57706		FM	5	○		135~145 145~175	8	16.0	35	200	12.5	-	4	-15	-25	17	14	H2
M57715 M57715R M57747		FM	10	○		144~148	13	18.1	48	200	12.5	-	2.8	-25 -30 -35		17	20	H2 H2R H6
M57713 * 11		SSB	10	○		144~148	17	19.2	40	200	12.5	9	2.2	-25	-30	17	26	H3
M67704 * 12		FM	10	○		142~175	13	28.1	40	20	12.5	5	2.5	-20	-30	16	20	H16
M57719L M57719N M57719		FM	10	○		135~145 142~163 145~175	14	18.4	40	200	12.5	-	4	-25	-35	17	20	H2
M57710-A * 13		FM	25	○		156~160	28	21.4	45	200	12.5	-	2.8	-25	-	17	40	H2
M57737		FM	25	○		144~148	30	21.7	45	200	12.5	-	2.8	-25	-30	17	40	H2
M57727 * 11		SSB	25	○		144~148	37	20.9	50	300	12.5	9	2.2	-25	-30	17	40	H3

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- \* 9 : High gain type to M57785 series
- \* 10 : High gain, small package type to M57732, M57796 series
- \* 11 : All mode type
- \* 12 : High gain, small package type to M57719 series
- \* 13 : For Marine Radio

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Type No.	Applications					Features											Max. Rating		PKG Outline
	Frequency Band	Function	Set Power (W)	Use		f MHz	Po W	Gp dB	$\eta$ t %	Pin mW	Vcc V	V <sub>BB</sub> V	$\rho$ in -	2fo dBc	3fo dBc	Vcc V	Pc W		
				M	P														
M57741UL M57741L M57741M M57741H	VHF 140 MHz	FM	25	○		135~148	28	21.4	40	200	12.5	-	3.3	-25	-30	17	35	H2	
146~160						21.4		200											
156~168		20.4	250																
164~175		19.7	300																
M67741L * 14 M67741H * 14		FM				135~150	30	21.7	40	200	12.5	-	3.3	-25	-30	17	35		H2
150~175						21.7		200											
M67781L M67781H		VHF BAND III	FM	35	○		135~160	40	21.2	40	300	12.5	-	3	-30	-30	17		50
150~175	21.2						300												
M57726 M57726R	FM		35	○			144~148	43	20.3	50	400	12.5	-	2.8	-35	-45	17	55	H2 H2R
							20.3		400										
M67727 * 15	SSB		45	○			144~148	60	20.7	50	500	12.5	9	2.8	-30	-35	16	78	H17
							20.7		500										
M67702	FM		50	○			150~175	60	10.7	40	5000	12.5	-	2.8	-30	-35	17	90	H17
		10.7					5000												
M67785 M67785H	VHF BAND III	FM	3		○	186~200	5	24.0	40	20	9.6	5	2.5	-25	-30	13	6	H12	
						24.0		20											
M67713 M67723		FM	5		○		220~225	7	12.4	45	500	12.5	5	2.5	-20	-30	16	10	H14 H13
							12.4		500										
M67730L		FM	25	○			175~200	30	20.0	43	300	12.5	-	2.8	-30	-35	17	40	H2
	20.0						300												
M57774 M67712 * 15	FM SSB	25	○			220~225	30	20.0	43	300	12.5	-	2.8	-30	-35	17	40	H2 H3	
						20.0		300											
M57786UL M57786L M57786M M57786H	UHF 400 MHz	FM				360~380	6	20.7	38	50	7.2	5	2.5	-25	-30	10	10	H12	
						20.7													
						20.7													
						20.7													
M57799L1 M57799L2 M57799L M57799M M57799H		FM	5		○		335~360	6	21.7	35	40	7.5	5	2.5	-25	-30	9	9	H13
	21.7																		
M67705UL M67705L M67705M M67705H	FM					380~400	7	25.4	40	20	9.6	5	2.5	-25	-30	13	10	H13	
						25.4													
						25.4													
						25.4													

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\* 14 : High power, wide band type to M57741 series

\* 15 : All mode type

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Type No.	Applications					Features											Max. Rating		PKG Outline							
	Frequency Band	Function	Set Power (W)	Use		f MHz	P <sub>o</sub> W	G <sub>p</sub> dB	$\eta$ t %	P <sub>in</sub> mW	V <sub>cc</sub> V	V <sub>BB</sub> V	$\rho$ in -	2fo dBc	3fo dBc	V <sub>cc</sub> V	P <sub>o</sub> W									
				M	P																					
M57797MA M57797SL M57797UL M57797L M57797H M57797UH M57797SH	UHF 400 MHz	FM	5		○	430~450	18.4		100				2.5													
350~380						15.4		200				4.4														
380~400						15.4		200				2.5														
400~430						7	15.4	40	200	12.5	5	2.5	-25	-30	16	10				H14						
450~470									200			2.5														
470~490									200			2.5														
490~512									200			2.5														
M57721L M57721M M57721							FM	5		○	350~400															
400~450											7	28.4	40	10	12.5	5	2.5	-30	-35	16	10			H12		
450~512																										
M67749SLR *16 M67749ULR *16 M67749L *16 M67749LR *16 M67749M *16 M67749MR *16 M67749H *16 M67749HR *16 M67749UHR *16 M67749SHR *16★★		FM	5		○						335~360															
360~380																										
400~430																										
400~430																										
430~450											7	25.4	35	20	12.5	5	2.5	-25	-30	15	10				H27	
430~450																										
450~470																										
450~470																										
470~490																										
490~512																										
M57714EL M57714SL M57714UL M57714L M57714M M57714 M57714UH M57714SH		FM	5		○	335~360																				
360~380																										
380~400																										
400~420						7	18.4	38	100	12.5	-	2	-30	-30	17	12				H3						
430~450																										
450~470																										
470~490																										
490~512																										
M67709L *17 M67709M *17 M67709H *17 M67709SH *17							FM	10		○	350~390															
390~430											13	31.1	35	10	12.5	5	2.8	-30	-30	16	20					
430~470																										
470~512																										

Note. ★★ Under development, M: for MOBILE, P: for PORTABLE. PKG outline: see references "Package outline".  
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\* 16: High gain, small package type to M57721, M57797 series  
 \* 17: High gain, small package type to M57709 series

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Type No.	Applications					Features											Max. Rating		PKG Outline														
	Frequency Band	Function	Set Power (W)	Use		f MHz	P <sub>o</sub> W	G <sub>p</sub> dB	$\eta$ t %	P <sub>in</sub> mW	V <sub>cc</sub> V	V <sub>BB</sub> V	$\rho$ in -	2fo dBc	3fo dBc	V <sub>cc</sub> V	P <sub>o</sub> W																
				M	P																												
M57704EL M57704SL M57704UL M57704L M57704M M57752 * 18 M57704MR * 20 M57704H M57704UH M57704SH	UHF 400 MHz	FM	10	○		335~360	13	18.1	35	200	12.5	-	2.8	-30	-30	17	20	H3															
360~380						35																											
380~400						35																											
400~420						35																											
430~450						35																											
430~450						40																											
430~450						35																											
450~470						35																											
470~490						35																											
490~512						35																											
M57716 * 19	SSB	10	○		430~450	17	19.2	35	200	12.5	9	2.5	-30	-30	17	128	H3																
M67729L2 M67729H2	FM	15	○		400~420 450~460	20	21.2	35	150	12.5	-	2.8 2	-30	-30	16	30	H18																
M57734	FM	15	○		453~458	25	19.2	40	300	12.5	-	2.5	-30	-30	17	35	H3																
M57729EL M57729SL M57729UL M57729L M57729 M57729H M57729UH M57729SH	UHF 400 MHz	FM	25	○		335~360	30	20.0	40	300	12.5	-	2.8	-30	-30	17	40	H3															
360~380																																	
380~400																																	
400~420																																	
430~450																																	
450~470																																	
470~490																																	
490~512																																	
M57745 * 19						SSB			25										○		430~450	33	20.4	40	300	12.5	9	2.5	-30	-30	17	40	H3
M57788L M57788M M57788MR * 20 M57788H M57788UH M57788SH						UHF 400 MHz			FM										35	○		400~430	40	21.2	300	12.5	-	3.5	-	-	-	-	-
430~450	45	20.5	400	13.5	2.8																												
430~450	45	20.5	40	13.5	2.8																												
450~470	40	21.2	300	12.5	3.5																												
470~490	40	21.2	300	12.5	3.5																												
490~512	40	21.2	300	12.5	3.5																												
M67703H M67703UH M67703SH	UHF 400 MHz	FM	45	○			450~470	50		7.0	10W	12.5	-	2.8	-30	-35	17	80				H17											
470~490																																	
490~512																																	
M67728	SSB	45	○		430~450		60	7.7		40	10W	12.5	9	2.8	-30	-35	16	78				H17											

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 \* 18: High efficiency type  
 \* 19: All mode type  
 \* 20: Reverse pin type

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	Frequency Band	Function	Set Power (W)	Use		f MHz	P <sub>o</sub> W	GP dB	$\eta$ t %	P <sub>in</sub> mW	V <sub>cc</sub> V	V <sub>BB</sub> V	$\rho$ in -	2fo dBc	3fo dBc	V <sub>cc</sub> V	P <sub>o</sub> W		
				M	P														
M57775 M57776	UHF 800 MHz	FM	Exiter Use	○		806~866	0.2	23.0	*21	1	8	-	3.0	-30	-30	15	0.3	H8	
890~915						0.3	1.5			2.8			0.6						
M67706 M67706U		FM	2		○		806~870	4	16.0	30	100	7.5	-	4	-30	-30	10	5	H13
896~941							9												
M67776L M67776H		FM	3		○		806~870	5	37.0	30	1	7.2	-	3	-30	-30	9.2	8	H11
896~941																			
M57755		FM	8	○			806~866	10	20.0	35	100	12.6	-	2.8	-30	-30	17	16	H3
M67736		FM	10	○			896~941	12	33.8	30	5	12.5	8	2.8	-30	-30	17	20	H3
M57764		FM	15	○			806~825	20	16.9	30	400	12.5	-	2.8	-30	-30	17	25	H3
M57792		FM	15	○			806~870	20	16.9	30	400	13.5	-	2.8	-30	-30	17	30	H3
M57749 * 22		FM	5	○			903~905	7	15.4	30	200	12.5	-	2.5	-30	-30	17	10	H3
M57793 * 22	FM	5	○			903~905	7	38.5	35	1	12.5	-	2.5	-30	-30	17	10	H11	
M67745	FM	5	○			846~903	7	35.4	35	2	12.5	-	2.8	-30	-30	17	10	H11	
M67761	FM	5		○		893~901	7	38.5	35	1	7.2	-	2.5	-30	-30	9.2	9	H11	
M67784	FM	3		○		889~915	3.8	35.7	35	1	9.6	-	2.8	-30	-30	12	6	H25	
M57744	FM	10	○			889~915	13	16.3	30	300	12.5	-	2.5	-25	-30	17	18	H3	
M67783 * 23	UHF	FM	1		○	1240~1300	1.4	23.0	20	7	7.2	-	3.5	-28	-	15	2.5	H27	
M67715 * 24	1.2	SSB	1		○	1240~1300	1.2	20.7	18	10	8	8	2.5	-30	-35	16	4	H13	
M67732 * 25	GHz	FM	1		○	1240~1300	1	21.5	25	7	7.2	-	2.5	-30	-	16	2	H13	
M67711	FM	10	○			1240~1300	16	12.0	30	1000	12.5	9	2.0	-45	-	17	20	H3	
M57762	SSB	10	○			1240~1300	18	12.5	30	1000	12.5	9	2.0	-45	-	17	20	H3	
M67775	UHF 1.4 GHz	FM	5	○		1465~1477	7.5	35.7	30	2	13.5	8	2.8	-25	-30	16	10	H3	

Note. M : for MOBILE, P : for PORTABLE. PKG outline : see references "Package outline".

Specifications are shown in minimum values. Please refer to each spec. sheet for precise information.

\* 21 : It  $\leq$  230mA @ P<sub>o</sub> = 0.2W

\* 22 : Personal radio

\* 23 : Small package type

\* 24 : Driver stage for M57762

\* 25 : Driver stage for M67711

# SELECTION GUIDE BY FUNCTION

## FOR CITIZEN'S BAND TRANSCEIVER, 27MHz 12V SERIES (T<sub>c</sub> = 25°C)

Type No.	Application	Structure	Maximum Ratings						I <sub>CEO</sub> (max) (μA)	P <sub>o</sub> (min)				η <sub>c</sub> (min) (%)	Package outline
			V <sub>CEO</sub> (V)	V <sub>EB0</sub> (V)	I <sub>c</sub> (A)	P <sub>c</sub> (W)	T <sub>j</sub> (°C)	R <sub>th-c</sub> (°C/W)		V <sub>CC</sub> (V)	f (MHz)	P <sub>in</sub> (W)	(W)		
2SC2086	HPA	Si, NPN, EP	75	4	1	0.8 *1	+135	137.5 *2	100	12	27	0.015	0.3	50	T-1B
2SC2166	HPA	Si, NPN, EP	75	5	4	12.5	+150	10	100	12	27	0.25	6	55	T-30
2SC1944	HPA	Si, NPN, EP	80	5	6	20	+150	6.25	100	12	27	1	13	55	T-30
2SC1945	HPA	Si, NPN, EP	80	5	6	20	+150	6.25	100	12	27	0.5	14	60	T-30E
2SC1969	HPA	Si, NPN, EP	60	5	6	20	+150	6.25	100	12	27	1	16	60	T-30
2SC3133	HPA	Si, NPN, EP	60	5	6	20	+150	6.25	100	12	27	0.5	13	60	T-30E

\* 1 : T<sub>a</sub> = 25°C, \* 2 : R<sub>th-a</sub>

## FOR MOBILE RADIOS, 13.5V SERIES (T<sub>c</sub> = 25°C)

2SC2097	HPA	Si, NPN, EP	50	5	15	150	+175	1.2	5000	13.5	30	4	75	55	T-40E
2SC3241	HPA	Si, NPN, EP	50	5	18	180	+175	0.83	5000	12.5	30	4	75	55	T-45E
2SC2904	HPA	Si, NPN, EP	50	5	22	200	+175	0.75	5000	12.5	30	7	100	55	T-40E
2SC3908	HPA	Si, NPN, EP	50	5	22	200	+175	0.75	5000	12.5	30	7	100	55	T-40E
2SC3240	HPA	Si, NPN, EP	50	5	25	270	+175	0.556	5000	12.5	30	7	100	55	T-45E

## 28V SERIES TO FIXED STATION APPLICATIONS (T<sub>c</sub> = 25°C)

2SC2133 *	HPA	Si, NPN, EP	55	4	5	75	+175	2.0	2000	28	220	4.5	30	55	T-40E
2SC2134 *	HPA	Si, NPN, EP	55	4	10	120	+175	1.25	5000	28	220	12	60	55	T-40E
2SC2609 *	HPA	Si, NPN, EP	55	4	15	170	+175	0.88	10000	28	220	25	100	55	T-40E

\* : Communication grade

## 150/400MHz BAND 7.2V SERIES FOR MOBILE RADIOS (T<sub>c</sub> = 25°C)

2SC2055	HPA	Si, NPN, EP	18	4	0.3	0.5 *1	+135	220 *2	30	7.2	175	0.01	0.2	50	T-1B
2SC3404	HPA	Si, NPN, EP	20	3.5	1	5	+175	30	200	7.2	175	0.08	1.5	55	T-46
2SC3017	HPA	Si, NPN, EP	20	3.5	1	4	+175	37.5	200	7.2	175	0.1	1.5	55	T-8E
2SC2056	HPA	Si, NPN, EP	18	4	0.6	4	+175	37.5	100	7.2	175	0.2	1.6	55	T-8E
2SC3018	HPA	Si, NPN, EP	20	3.5	1.5	10	+175	15	300	7.2	175	0.15	3	55	T-31E
2SC3001	HPA	Si, NPN, EP	20	3.5	3	20	+175	7.5	500	7.2	175	0.3	6	60	T-31E
2SC4240	HPA	Si, NPN, EP	20	3.5	3	20	+175	7.5	500	7.2	175	0.3	6	60	T-46
2SC3629	HPA	Si, NPN, EP	20	3.5	1	5	+175	30	200	7.2	520	0.2	1.2	55	T-46
2SC3103	HPA	Si, NPN, EP	20	3.5	1.5	10	+175	15	300	7.2	520	0.6	2.8	55	T-31E
2SC3379	HPA	Si, NPN, EP	20	3.5	1.5	10	+175	15	300	7.2	520	0.6	2.8	55	T-46
2SC3104	HPA	Si, NPN, EP	20	3.5	3	20	+175	7.5	500	7.2	520	2	6	60	T-31E

\* 1 : T<sub>a</sub> = 25°C, \* 2 : R<sub>th-a</sub>

## UHF BANDWIDTH RANGE 24V SERIES FOR LINEAR AMPLIFIER (T<sub>c</sub> = 25°C)

2SC2797 *	HPA	Si, NPN, EP	45	4	1	10	+175	15	400	24	770	1	5	55	T-41
2SC2798 *	HPA	Si, NPN, EP	45	4	2	30	+175	5	1000	24	770	3	12	55	T-41
2SC2799 *	HPA	Si, NPN, EP	45	4	4	50	+175	3	1500	24	770	8	25	55	T-41E

\* : Communication grade

## SELECTION GUIDE BY FUNCTION

150MHz BAND 13.5V SERIES FOR MOBILE RADIOS (T<sub>c</sub> = 25°C)

Type No.	Structure	Application	Maximum Ratings						I <sub>cbo</sub> (max) (μA)	P <sub>o</sub> (min)				η <sub>c</sub> (min) (%)	Package outline
			V <sub>CB0</sub> (V)	V <sub>EB0</sub> (V)	I <sub>c</sub> (A)	P <sub>c</sub> (W)	T <sub>j</sub> (°C)	R <sub>th-c</sub> (°C/W)		V <sub>cc</sub> (V)	f (MHz)	P <sub>e</sub> (W)	(W)		
<b>2SC2053</b>	HPA	Si, NPN, EP	40	4	0.3	0.6 *1	+135	183 *2	20	13.5	175	0.004	0.15	40	T-1B
<b>2SC741</b> *3	HPA	Si, NPN, EP	40	4	0.3	2.5	+175	60	1	13.5	150	0.01	0.2	50	T-8C
<b>2SC2538</b>	HPA	Si, NPN, EP	40	4	0.4	3	+135	36.7	100	13.5	175	0.05	0.5	45	T-1B
<b>2SC730</b> *3	HPA	Si, NPN, EP	40	4	0.4	3	+175	50	10	13.5	150	0.1	1	50	T-8
<b>2SC1970</b>	HPA	Si, NPN, EP	40	4	0.6	5	+150	25	100	13.5	175	0.12	1	50	T-30
<b>2SC1947</b> *4	HPA	Si, NPN, EP	35	4	1	10	+175	15	500	13.5	175	0.3	3.5	50	T-8E
<b>2SC2627</b>	HPA	Si, NPN, EP	35	4	2	20	+175	7.5	1000	12.5	175	0.25	5	60	T-41
<b>2SC2237</b>	HPA	Si, NPN, EP	35	4	2	20	+175	7.5	500	13.5	175	0.25	6	60	T-31E
<b>2SC3628</b>	HPA	Si, NPN, EP	35	4	2	20	+175	7.5	500	13.5	175	0.25	6	60	T-46
<b>2SC1971</b>	HPA	Si, NPN, EP	35	4	2	12.5	+175	10	500	13.5	175	0.6	6	60	T-30E
<b>2SC1965</b> *4	HPA	Si, NPN, EP	35	4	1	15	+175	10	500	13.5	175	0.6	6	50	TC-17
<b>2SC2539</b>	HPA	Si, NPN, EP	35	4	4	35	+175	4.3	1000	13.5	175	0.5	14	60	T-31E
<b>2SC1729</b>	HPA	Si, NPN, EP	35	4	3.5	35	+175	4.3	1000	13.5	175	1.4	14	60	T-31E
<b>2SC1972</b>	HPA	Si, NPN, EP	35	4	3.5	25	+175	6	1000	13.5	175	2.5	14	60	T-30E
<b>2SC2628</b>	HPA	Si, NPN, EP	35	4	4	40	+175	3.75	2000	12.5	175	1	15	60	T-41
<b>2SC2094</b>	HPA	Si, NPN, EP	40	4.5	3.5	30	+175	5	2000	13.5	175	2	15	60	T-31E
<b>2SC1946</b>	HPA	Si, NPN, EP	35	4	7	50	+175	3	2000	13.5	175	6	28	60	T-31E
<b>2SC1946A</b>	HPA	Si, NPN, EP	35	4	7	50	+175	3	2000	13.5	175	3	30	60	T-31E
<b>2SC2629</b>	HPA	Si, NPN, EP	35	4	8	60	+175	2.5	3000	13.5	175	3.5	30	60	T-41
<b>2SC2540</b>	HPA	Si, NPN, EP	35	4	10	75	+175	2	2500	13.5	175	6	40	60	T-40E
<b>2SC2630</b>	HPA	Si, NPN, EP	35	4	14	100	+175	1.5	5000	12.5	175	10	50	60	T-40E
<b>2SC2694</b>	HPA	Si, NPN, EP	35	4	20	140	+175	1.07	5000	12.5	175	15	70	60	T-40E
<b>MTH326</b> ★★	HPA	Si, NPN, EP	35	4	25	185	+175	0.8	5000	12.5	175	15	80	60	T-40E

\* 1 : T<sub>a</sub> = 25°C, \* 2 : R<sub>th-a</sub>

\* 3 : High-reliability Communication grade

\* 4 : Communication grade

★★ : Under development

## SELECTION GUIDE BY FUNCTION

400MHz BAND 13.5V SERIES FOR MOBILE RADIOS (T<sub>c</sub> = 25°C)

Type No.	Structure	Application	Maximum Ratings						I <sub>CB0</sub> (max) (μA)	P <sub>0</sub> (min)				η <sub>c</sub> (min) (%)	Package outline
			V <sub>CB0</sub> (V)	V <sub>EB0</sub> (V)	I <sub>c</sub> (A)	P <sub>c</sub> (W)	T <sub>j</sub> (°C)	R <sub>th-c</sub> (°C/W)		V <sub>CC</sub> (V)	f (MHz)	P <sub>in</sub> (W)	(W)		
2SC3019	HPA	Si, NPN, EP	35	4	0.4	0.9	+135	166	500	12.5	520	0.02	0.5	40	T-43
2SC908 *1	HPA	Si, NPN, EP	40	4	0.5	4.3	+175	35	50	13.5	500	0.4	1	50	T-8
2SC2131 *2	HPA	Si, NPN, EP	40	4	0.6	4	+175	37.5	100	13.5	500	0.3	1.4	50	T-8E
2SC3101	HPA	Si, NPN, EP	35	4	1	10	+175	15	300	12.5	520	0.8	3	50	T-8E
2SC3630	HPA	Si, NPN, EP	35	4	1	10	+175	15	300	12.5	520	0.8	3	50	T-46
2SC1966	HPA	Si, NPN, EP	35	3.5	1	10	+175	15	100	13.5	470	0.5	3	50	T-31E
2SC3020	HPA	Si, NPN, EP	35	4	1	10	+175	15	300	12.5	520	0.3	3	50	T-31E
2SC1967	HPA	Si, NPN, EP	35	4	2	20	+175	7.5	200	13.5	470	1.5	7	50	T-31E
2SC3021	HPA	Si, NPN, EP	35	4	2	20	+175	7.5	500	12.5	520	1.2	7	50	T-31E
2SC4167	HPA	Si, NPN, EP	35	4	2	20	+175	7.5	500	12.5	520	1.2	7	50	T-46
2SC1968	HPA	Si, NPN, EP	35	4	5	40	+175	3.75	500	13.5	470	6	14	50	T-31E
2SC1968A	HPA	Si, NPN, EP	35	4	5	40	+175	3.75	500	13.5	470	4	14	50	T-31E
2SC3022	HPA	Si, NPN, EP	35	4	7	50	+175	3	2000	12.5	520	6	18	55	T-31E
2SC2695	HPA	Si, NPN, EP	35	4	10	75	+175	2	2000	13.5	520	9	28	55	T-31E
2SC2905	HPA	Si, NPN, EP	35	4	15	120	+175	1.25	2000	12.5	520	15	45	60	T-40E
2SC3102	HPA	Si, NPN, EP	35	4	18	170	+175	0.88	5000	12.5	520	20	60	60	T-40E
2SC4989	HPA	Si, NPN, EP	35	4	20	150	+175	1.00	5000	12.5	520	20	70	60	T-40E

\* 1 : High-reliability Communication grade

\* 2 : Communication grade

900MHz BAND 12.5V SERIES (T<sub>c</sub> = 25°C)

2SC2932 *1	HPA	Si, NPN, EP	35	3	2	20	+175	7.5	2000	12.5	900	1	6	55	T-31B
2SC2933 *1	HPA	Si, NPN, EP	35	3	4	40	+175	3.75	2000	12.5	900	3	14	50	T-31B
2SC3105 *1	HPA	Si, NPN, EP	35	3	10	80	+175	1.87	5000	12.5	850	15	30	50	T-44
2SC3804 *1	HPA	Si, NPN, EP	35	3	12	100	+175	1.5	5000	13.5	850	20	40	50	T-44
2SC4624 *2	HPA	Si, NPN, EP	35	2.5	15	110	+175	1.36	5000	12.5	900	15	45	45	T-44

\* : Common Base \* 2 : Common Emitter

L-BAND (1.65GHz) 28V (T<sub>c</sub> = 25°C)

2SC4838	HPA	Si, NPN, EP	50	4	2	17.5	+175	8.6	1000	28	1650	0.7	6	45	T-31B
2SC4524	HPA	Si, NPN, EP	50	4	2.5	30	+175	5	1000	28	1650	2	7	45	T-31B
2SC4525	HPA	Si, NPN, EP	50	4	5	60	+175	2.5	2000	28	1650	5	20	40	X-139
2SC4526	HPA	Si, NPN, EP	50	4	7.5	90	+175	1.7	3000	28	1650	10	28	40	X-139

\* : Common Base

15V SERIES FOR CATV/MATV AMPLIFIER (T<sub>c</sub> = 25°C)

Type No.	Structure	Application	Maximum Ratings						I <sub>CB0</sub> (max) (μA)	G <sub>p</sub> (min)				η <sub>c</sub> (min) (%)	Package outline
			V <sub>CB0</sub> (V)	V <sub>EB0</sub> (V)	I <sub>c</sub> (A)	P <sub>c</sub> (W)	T <sub>j</sub> (°C)	R <sub>th-c</sub> (°C/W)		V <sub>CC</sub> (V)	f (MHz)	P <sub>in</sub> (W)	(dB)		
2SC1324 *1	HPA	Si, NPN, EP	35	4	0.15	3	+175	50	50	15	770	0.03	9	-	T-8

\* 1 : High-reliability Communication grade