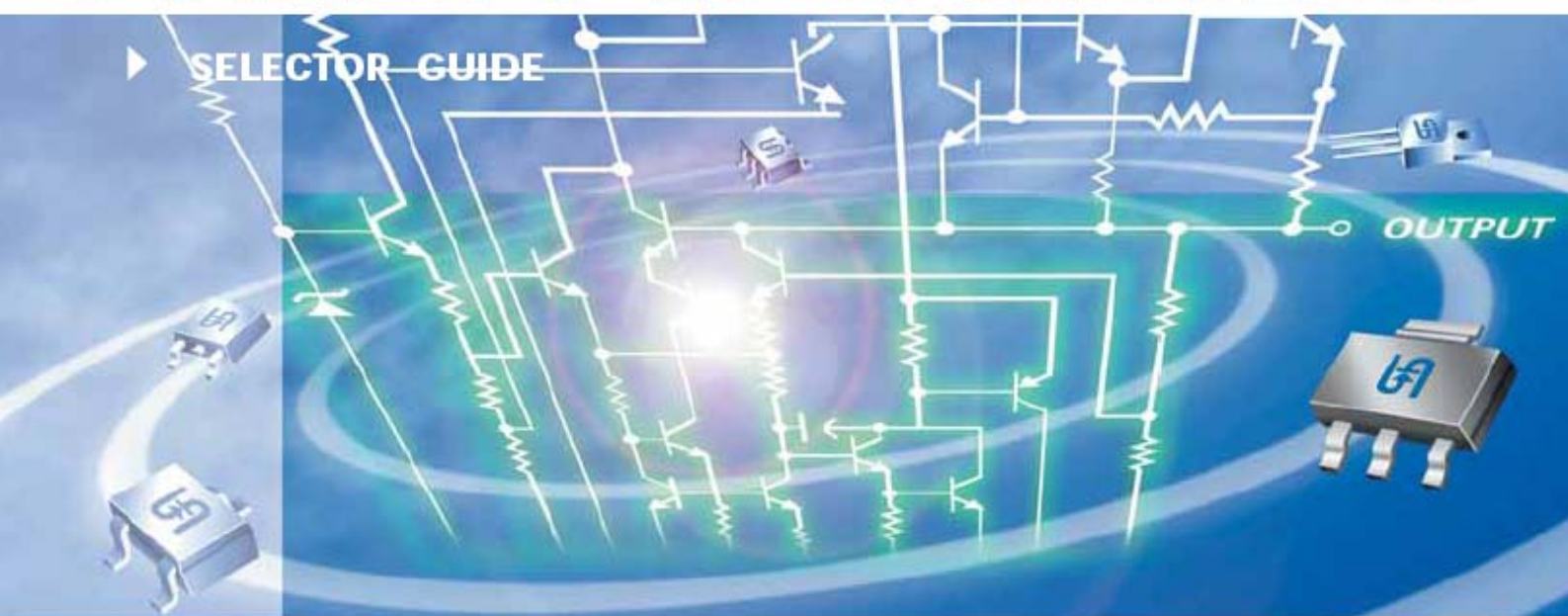


ANALOG IC & MOSFETS



Analogue IC Product Portfolio

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Linear Voltage Regulator

Part#	Supply Voltage (Max.)	Output Voltage	Output Current	Dropout Voltage	Accuracy (%)	Features (Note)	Package
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Standard Linear Voltage Regulator

TS7800B	35/40V	5/6/8/9/10/12/15/18/24V	1.5A	2V	±4	T	TO-220, ITO-220
TS7900B	-35/-40V	-5/-8/-9/-12/-15/-18/-24V	1.5A	2V	±4	T	TO-220, ITO-220
TS7800/A	35/40V	5/6/8/9/10/12/15/18/24V	1.0A	2V	±4 / ±2	T	TO-220, ITO-220, TO-263
TS7900/A	-35/-40V	-5/-8/-9/-12/-15/-18/-24V	1.0A	2V	±4 / ±2	T	TO-220, ITO-220, TO-263
TS78M00/A	35/40V	5/6/8/9/12/15/18/24V	0.5A	2V	±4 / ±2	T	TO-220, TO-252
TS79M00/A	-35/40V	-5/-8/-9/-12/-15/-18/-24V	0.5A	2V	±4 / ±2	T	TO-220, TO-252
TS78L00	30V	3.3/5/6/8/9/12/15/18/24V	0.1A	2V	±4	T	TO-92, SOP-8, SOT-89
TS79L00	-30V	-5/-8/-9/-12/-15/-18/-24V	0.1A	2V	±4	T	TO-92, SOP-8, SOT-89
TS317	40V	Adj	1.5A	2V	±4	T	TO-220, TO-263, TO-252, SOT-223
TS317L	40V	Adj	0.1A	2V	±4	T	TO-92, SOP-8

Low Drop Out Voltage Regulator

* TS3480	20V	Adj/1.5/1.8/2.5/3.3/5V	0.1A	1.1V	±4	C, T	SOT-23
TS1115/A	15V	Adj/1.5/1.8/2.5/3.3/5V	0.5A	1.3V	±2	C, T	SOT-89, SOT-223, TO-92
TS1117B	15V	Adj/1.5/1.8/2.5/3.3/5V	0.8A	1.3V	±2	C, T	TO-252, SOT-223, SOP-8
TS1117	7V	Adj/1.5/1.8/2.5/3.3/5V	1.0A	1.3V	±2	C, T	TO-220, TO-263, TO-252, SOT-223
TS1086	7V	Adj/1.5/1.8/2.5/3.3/5V	1.5A	1.3V	±2	C, T	TO-220, TO-263, TO-252, SOT-223
TS1085	7V	Adj/1.8/2.5/3.3/5V	3.0A	1.3V	±2	C, T	TO-220, TO-263, TO-252
TS1084	7V	Adj/1.8/2.5/3.3/5V	5.0A	1.3V	±2	C, T	TO-220, TO-263, TO-252
TS1583	7V / 13V	Adj/1.8/2.5/3.3/5V	1.5A	0.6V	±2	C, T	TO-220-5L, TO-263-5L
TS1582	7V / 13V	Adj/1.8/2.5/3.3/5V	3.0A	0.6V	±2	C, T	TO-220-5L, TO-263-5L
TS1581	7V / 13V	Adj/1.8/2.5/3.3/5V	5.0A	0.6V	±2	C, T	TO-220-5L, TO-263-5L
TS1537A/B/C	7V	3.3/2.5 & 2.5V/1.8 & 3.3/1.8	1.0A	0.6V	±2	C, T	TO-220-5L, TO-263-5L

CMOS Low Drop Out Voltage Regulator

TS9000/A	7V	2.5/2.7/2.8/3.0/3.3/3.5V	0.3A	0.3V	±1.5	C, T	SOT-23, SOT-89, TO-92
TS9001	7V	1.5/1.8/2.5/3.0/3.3	0.3A	0.3V	±1.5	B, C, E, T	SOT-25
TS9002	7V	1.2/1.5/2.5/3.3V	0.3A	0.3V	±1.5	C, E, P, T	SOT-25
TS9003	7V	1.5/1.8/2.5/3.0/3.3V	0.3A	0.3V	±1.5	B, C, E, P, T	SOT-26
TS9004	7V	adj	0.3A	0.3V	±2.5	C, E, T	SOT-26
TS9005	7V	1.8/2.5/2.8/3.0/3.3V	0.6A	0.6V	±1.5	C, T	SOT-89, SOT-223
TS9006	7V	1.8/2.5/2.8/3.0/3.3V	0.15A	0.3V	±2	B, C, E, N, T	SOT-25, SOT-343
TS9007	7V	1.2/1.5/1.8/2.5/2.8/3.0/3.3V	0.3A	0.4V	±2	B, C, E, N, T	SOT-25
TS9010	10V	1.5/1.8/2.5/3.3/5.0V	0.15A	0.4V	±2	E, L, T	SOT-25
TS9011	10V	1.5/1.8/2.5/3.0/3.3/5.0V	0.25A	0.4V	±2	L, T	SOT-23, SOT-89
* TS9012	10V	1.5/1.8/2.5/3.3/5.0V	0.3A	0.4V	±2	E, L, T	SOT-25
TS9013	10V	2.5/3.3/5.0V	0.45A	0.6V	±2	L, T	SOT-89, SOT-223,

Note: B: bypass C: current limit E: enable L: low quiescent N: low noise P: power good T: thermal shutdown

Remark: * Available in 2007/Q1

Ultra Low Drop Out Voltage Regulator

Part# (Remark)	Supply Voltage (Max.)	Output Voltage	Output Current	Dropout Voltage	Accuracy (%)	Features (Note)	Package
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Low Voltage

TS5213	20V	2.5/3.3/5V	0.08A	0.4V	±3	C, E, T	SOT-25, SOT-353
TS5204	20V	2.5/3.0/3.3/5V	0.15A	0.4V	±2	C, T	SOT-23, SOT-89
TS5205	20V	Adj/2.5/3.0/3.3/5V	0.15A	0.3V	±2	B, C, E, T	SOT-25
TS5201	20V	Adj/2.5/3.0/3.3/5V	0.2A	0.4V	±2	B, C, E, T	SOP-8
TS5214	20V	2.5/3.0/3.3/5V	0.3A	0.5V	±2	C, T	SOT-23, SOT-89
TS5215	20V	Adj/2.5/3.0/3.3/5V	0.3A	0.5V	±2	B, C, E, T	SOT-25, SOP-8
TS39100	20V	1.24/1.5/1.8/2.5/3.3/5V	1.0A	0.5V	±2	C, T	TO-252, SOT-223
TS39101	20V	1.24/1.5/1.8/2.5/3.3/5V	1.0A	0.5V	±2	C, E, T	SOP-8
TS39102	20V	Adj	1.0A	0.5V	±2	C, E, T	SOP-8
TS39103	20V	Adj/1.5/1.8/2.5/3.3/5V	1.0A	0.5V	±2	C, F, T	TO-252-5L
TS39104	20V	Adj	1.0A	0.5V	±2	C, E, T	SOP-8
TS178RS00	20V	1.5/1.8/2.5/3.3/5V	1.0A	0.5V	±2	C, E, T	ITO-220-4L
TS39150	20V	1.5/1.8/2.5/3.3/5V	1.5A	0.6V	±2	C, T	TO-220, TO-263
TS39151	20V	1.5/1.8/2.5/3.3/5V	1.5A	0.6V	±2	C, E, F, T	TO-220-5L, TO-263-5L
TS39152	20V	Adj	1.5A	0.6V	±2	C, E, T	TO-220-5L, TO-263-5L
TS39153	20V	1.5/1.8/2.5/3.3/5V	1.5A	0.6V	±2	C, E, S, T	TO-220-5L, TO-263-5L
TS278RS00	20V	1.5/1.8/2.5/3.3/5V	2.0A	0.6V	±2	C, E, T	ITO-220-4L
TS39200	20V	1.5/1.8/2.5/3.3/5V	2.0A	0.6V	±2	C, T	TO-220, TO-263
TS39201	20V	1.5/1.8/2.5/3.3/5V	2.0A	0.6V	±2	C, E, F, T	TO-220-5L, TO-263-5L
TS39202	20V	Adj	2.0A	0.6V	±2	C, E, T	TO-220-5L, TO-263-5L
TS39203	20V	1.5/1.8/2.5/3.3/5V	2.0A	0.6V	±2	C, E, S, T	TO-220-5L, TO-263-5L
TS39204	20V	1.5/1.8/2.5/3.3/5V	2.0A	0.6V	±2	C, E, T	TO-220-5L, TO-263-5L
* TS39300	20V	1.8/2.5/3.3/5.0V	3.0A	0.6V	±2	C, T	TO-220, TO-263
* TS39301	20V	1.8/2.5/3.3/5.0V	3.0A	0.6V	±2	C, E, F, T	TO-220-5L, TO-263-5L
* TS39302	20V	Adj	3.0A	0.6V	±2	C, T	TO-220-5L, TO-263-5L
* TS39303	20V	1.8/2.5/3.3/5.0V	5.0A	0.6V	±2	C, S, T	TO-220-5L, TO-263-5L
* TS39304	20V	1.8/2.5/3.3/5.0V	5.0A	0.6V	±2	C, S, T	TO-220-5L, TO-263-5L
* TS39500	20V	1.8/2.5/3.3/5.0V	5.0A	0.6V	±2	C, T	TO-220, TO-263
* TS39501	20V	1.8/2.5/3.3/5.0V	5.0A	0.6V	±2	C, E, F, T	TO-220-5L, TO-263-5L
* TS39502	20V	Adj	5.0A	0.6V	±2	C, E, F, T	TO-220-5L, TO-263-5L
* TS39503	20V	1.8/2.5/3.3/5.0V	5.0A	0.6V	±2	C, E, S, T	TO-220-5L, TO-263-5L

Note: B: bypass C: current limit E: enable F: flag L: low quiescent R: reset S: sense T: thermal shutdown

Remark: * Available in 2007/Q1

Ultra Low Drop Out Voltage Regulator

Part# (Remark)	Supply Voltage (Max.)	Output Voltage	Output Current	Dropout Voltage	Accuracy (%)	Features (Note)	Package
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High Voltage

TS2950	30V	3.0/3.3/5V	0.15A	0.4V	±1	C, T	TO-92
TS2951	30V	3.0/3.3/5V/Adj	0.15A	0.4V	±1	C, E, F, T	SOP-8
TS2937	30V	1.8/2.5/3.3/5/8/10/12V	0.50A	0.6V	±2	C, T	TO-220, TO-263, TO-252, SOT-223
* TS2938	30V	1.8/2.5/3.3/5/8/10/12V	0.50A	0.6V	±2	C, E, T	TO-252-5L, SOP-8
TS2940	30V	1.8/2.5/3.3/5V	1.0A	0.6V	±2	C, T	TO-220, TO-263, TO-252, SOT-223
TS178R00	30V	5/8/9/12V	1.0A	0.5V	±2	C, E, T	ITO-220-4L
TS29150	30V	2.5/3.3/5/12V	1.5A	0.5V	±2	C, T	TO-220, TO-263
TS29151	30V	2.5/3.3/5/12V	1.5A	0.5V	±2	C, E, F, T	TO-220-5L, TO-263-5L
TS29152	30V	Adj	1.5A	0.5V	±2	C, E, T	TO-220-5L, TO-263-5L
TS29153	30V	Adj	1.5A	0.5V	±2	C, F, T	TO-220-5L, TO-263-5L
TS278R00	30V	5/8/9/12V	2.0A	0.5V	±2	C, E, T	ITO-220-4L
TS378R00	30V	5/8/9/12V	3.0A	0.5V	±2	C, E, T	ITO-220-4L

High Voltage for Automotive

Part# (Remark)	Supply Voltage (Max.)	Output Voltage	Output Current	Quiescent Current	Dropout Voltage	Accuracy (%)	Features (Note)	Package
* TS4260	40V	5V	0.65A	600uA	0.4V	±2	C, D, R, T, V	TO-220-5L, TO-263-5L, TO-252-5L
TS4264	40V	5V	0.15A	300uA	0.4V	±2	C, T	SOT-223
TS4264G	40V	5V	0.15A	40uA	0.4V	±2	C, L, T	SOT-223
TS4266	40V	5V	0.15A	300uA	0.4V	±2	C, E, T	SOT-223-4L, SOP-8
TS4266G	40V	5V	0.15A	40uA	0.4V	±2	C, E, L, T	SOT-223-4L, SOP-8
* TS4267	40V	5V	0.18A	1.3mA	0.4V	±2	C, D, E, R, T	TO-220-7L, TO-263-7L, SOP-14
* TS4268	40V	5V	0.18A	300uA	0.4V	±2	A, C, D, R, W, T	SOP-8
TS4270	40V	5V	0.65A	1mA	0.4V	±2	C, D, R, T, V	TO-220-5L, TO-263-5L, TO-252-5L
* TS4271	40V	5V	0.65A	800uA	0.4V	±2	C, D, E, R, T, V, W	TO-220-7L, TO-263-7L
TS4274	30V	2.5/3.3/5V	0.40A	300uA	0.6V	±2	C, T	TO-220, TO-263, TO-252

Note: A: adjust reset C: current limit D: delay reset E: enable L: low quiescent R: reset output T: thermal shutdown
V: over voltage protection W: watchdog

Remark: * Available in 2007/Q1

Voltage Reference

Part#	Supply Voltage (Max.)	Reference Voltage	Output Current	Operation Current (max.)	Accuracy (%)	Package
TS431 / A / B	37V	2.495V	0.1A	500uA	±2 / ±1 / ±0.5	TO-92, SOT-89, SOT-23, SOP-8
TS1431 / A / B	37V	2.495V	0.1A	500uA	±2 / ±1 / ±0.5	TO-92, SOT-23
TS432 / A	20V	1.24V	0.1A	80uA	±2 / ±1	TO-92, SOT-23, SOT-25

Switching Regulator

Part# (Remark)	Supply Voltage (range)	Output Voltage	Output Current	Frequency	Reference Voltage	Features (Note)	Package
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DC to DC Converter

TS34063	3 ~ 40V	Adj	1.5A	100~100KHz	1.25V	A, C, T	DIP-8, SOP-8
* TS3063	3 ~ 40V	Adj	0.8A	100~180KHz	1.25V	A, C, T	SOP-8, MSOP-8

Step-Down (Buck) Simple Switching Regulator

TS2576	4.5 ~ 40V	Adj/3.3/5.0/12V	3A	52KHz	1.23V	C, E, T	TO-220-5L, TO-263-5L
TS2596	4.5 ~ 40V	Adj/3.3/5.0/12V	3A	150KHz	1.23V	C, E, T	TO-220-5L, TO-263-5L
TS2596S	4.5 ~ 24V	Adj/3.3/5.0	2A	150KHz	1.23V	C, E, T	TO-252-5L, SOP-8
* TS2506	4.5 ~ 24V	Adj	2A	300KHz	0.8V	C, E, S, T	TO-252-5L, SOP-8
* TS3406	2.5 ~ 5.5V	Adj/1.5/2.5	0.6A	1200KHz	0.6V	C, E, T, U	SOT-25

Step-Up (Boost) Simple Switching Regulator

* TS1935	2.7 ~ 5.5V	Adj	1.5A	1600KHz	1.23V	A, C, E, T	SOT-25
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Note: A: adjustable frequency C: current limit E: enable S: soft start T: thermal shutdown U: under voltage lockout

Remark: * Available in 2007/Q1

Amplifier & Comparator

Part#	Supply Voltage (Max.)	Input Bias Current	Input Offset Voltage	Input Offset Current	Slew Rate (typ)	Gain Bandwidth	Numbers of Operators	Package
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Amplifier

TS324	±16V	500nA	7mV	150nA	0.3V/uS	1.0MHz	4	DIP-14, SOP-14
TS358	±16V	500nA	7mV	150nA	0.3V/uS	1.0MHz	2	DIP-8, SOP-8
TS2902	±13V	500nA	7mV	150nA	0.3V/uS	1.0MHz	4	DIP-14, SOP-14
TS2904	±13V	500nA	7mV	150nA	0.3V/uS	1.0MHz	2	DIP-8, SOP-8
TS4558	±18V	500nA	±6mV	±200nA	1.6V/uS	3.0MHz	2	DIP-8, SOP-8
TS34119	18V	200nA	--	--	--	1.5MHz	2	DIP-8, SOP-8

Comparator

TS339	±18V	250nA	±5mV	±50nA	1.3uS	--	4	DIP-14, SOP-14
TS393	±18V	250nA	±5mV	±50nA	1.3uS	--	2	DIP-8, SOP-8
TS2901	±18V	250nA	±7mV	±50nA	1.3uS	--	4	DIP-14, SOP-14
TS2903	±18V	250nA	±7mV	±50nA	1.3uS	--	2	DIP-8, SOP-8

Telephone IC

Part#	Supply Voltage (Max.)	Supply Initiation Voltage	Supply Initiation Current	Sustaining Voltage	Sustaining Current	Output Frequency	Package
TS2418	26V	12.2 ~ 13V	1 ~ 1.8mA	8 ~ 8.8V	--	2300Hz	DIP-8, SOP-8
TS31002	36V	16.8 ~ 21.2V	1.4 ~ 4.2mA	9.5 ~ 12.2V	0.7 ~ 2.5mA	700Hz	DIP-8, SOP-8

Analogue IC

Part#	Supply Voltage (Max.)	Threshold Voltage	Quiescent Current	Type	Accuracy	Features (Note)	Package
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Reset IC

TS803R	6V	2.70/2.93/4.2V	30uA	Open-Drain	±1.5%	---	SOT-23
TS809 / R	6V	2.32/2.63/2.93/3.08/4.0/4.38/4.63V	30uA	Active Low	±1.5%	---	SOT-23
TS810 / R	6V	2.32/2.63/2.93/3.08/4.0/4.38/4.63V	30uA	Active High	±1.5%	---	SOT-23
TS823	6V	2.19/2.32/2.63/2.93/3.08/4.38/4.63V	10uA	Active Low	±1.5%	M, W	SOT-25
TS824	6V	2.19/2.32/2.63/2.93/3.08/4.38/4.63V	10uA	Active High	±1.5%	C, W	SOT-25
TS825	6V	2.19/2.32/2.63/2.93/3.08/4.38/4.63V	10uA	Active High	±1.5%	C, M	SOT-25

Voltage Detector IC

Part#	Supply Voltage (Max.)	Detect Voltage	Quiescent Current	Type	Accuracy	Hysteresis Range	Package
* TS61C00	12V	2/2.4/2.5/3.0/3.3/4.0/4.2/4.4/4.5V	1uA	CMOS	±2.0%	8.0%	SOT-23
* TS61N00	12V	2/2.4/2.5/3.0/3.3/4.0/4.2/4.4/4.5V	1uA	Open-Drain	±2.0%	8.0%	SOT-23

Adapter IC

Part#	Supply Voltage Range	Input Supply Current	Reference Voltage	Voltage Sense	Voltage Control	Current Control	Output Short Current	Package
* TS1051	2.5 ~ 12V	2mA	1.21V	200mV	3.5mA/mV	7mA/mV	50mA	SOT-26, SOP-8

ULDO Driver IC

Part# (Remark)	Supply Voltage (Max.)	Output Voltage	Driving Current	Output Current	Dropout Voltage	Accuracy (%)	Features (Note)	Package
* TS1123	35V	3.3/5/8/9/12/15V	0.15A	4A	0.4V	±2	C, T	SOT-223-4L, SOT-89-5L

Note C: complementary reset M: manual reset W: watchdog
Remark: * Available in 2007/Q1

MOSFET

Part# (Remark)	Type	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (mΩ) (max)				Qg (nC) (Vgs=4.5V)	Package
					10V	4.5V	2.5V	1.8V		

N-Channel

TSM2312	N	20	±8	5.0	--	33	40	51	11.2	SOT-23
TSM2302	N	20	±8	2.8	--	65	95	--	5.4	SOT-23
TSM2314	N	20	±12	5.0	--	33	40	51	7.1	SOT-23
* TSM3400	N	30	±12	5.8	28	33	52	--	5.0	SOT-23
TSM3404	N	30	±20	5.8	28	43	--	--	4.5	SOT-23
TSM2N7002E	N	60	±20	0.25	3Ω	4Ω	--	--	--	SOT-23, SOT-323
TSM2N7002	N	60	±20	0.2	7.5Ω	7.5Ω	--	--	--	SOT-23
TSM2N7002ED	Dual N	60	±20	0.25	3Ω	4Ω	--	--	--	SOT-363
TSM2N7000	N	60	±20	0.2	5Ω	5Ω	--	--	--	TO-92
TSM3462	N	20	±8	5	--	33	40	51	11.2	SOT-26
* TSM3900D	Dual N	20	±8	2.0	--	55	75	110	5.4	SOT-26
TSM3442	N	20	±8	4	--	70	90	--	5.4	SOT-26
TSM9966D	Dual N	20	±12	5	--	30	40	--	7.1	SOT-26
TSM6988D	Dual N	20	±12	5	--	25	35	--	9.2	SOT-26
TSM3460	N	20	±12	6	--	30	50	80	9.2	SOT-26
TSM3446	N	20	±12	5.3	--	45	65	--	7.1	SOT-26
* TSM3424	N	30	±20	6.7	28	38	--	--	4.5	SOT-26
* TSM7900D	Dual N	20	±12	6	--	22	30	--	9.2	DFN 3x3
TSM9428	N	20	±8	6	--	30	40	51	11.2	SOP-8
TSM9428D	Dual N	20	±8	6	--	30	40	51	11.2	SOP-8
TSM7311D	Dual N	20	±12	6	--	22	29	--	9.2	SOP-8
TSM7401	N	20	±12	8	--	25	30	65	4.5	SOP-8
TSM4426	N	20	±12	8	--	25	35	--	7.1	SOP-8
TSM9926D	Dual N	20	±12	6	--	28	40	--	7.1	SOP-8
TSM4410	N	25	±20	10	14	20	--	--	15	SOP-8
TSM4410D	Dual N	25	±20	10	15	21	--	--	15	SOP-8
* TSM4872	N	30	±20	16	8	10	--	--	26	SOP-8
* TSM4886	N	30	±20	13	10	13	--	--	14.5	SOP-8
* TSM4944D	Dual N	30	±20	12.2	9.5	16	--	--	13.5	SOP-8
* TSM4392	N	30	±20	12.5	11.5	16.5	--	--	10	SOP-8
TSM4416	N	30	±20	9	18	28	--	--	13	SOP-8
* TSM4416D	Dual N	30	±20	6	19	28	--	--	13	SOP-8
TSM4414	N	30	±20	8	25	35	--	--	4.5	SOP-8
TSM4936D	Dual N	30	±20	6	36	53	--	--	4.5	SOP-8
TSM6968D	Dual N	20	±12	6	--	22	30	--	9.2	TSSOP-8
TSM6866D	Dual N	20	±12	6	--	30	40	--	7	TSSOP-8

Note D: Dual Channel

Remark: * Available in 2007/Q1

MOSFET

Part# (Remark)	Type	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (mΩ) (max)				Qg (nC) (V _{GS} =4.5V)	Package
					10V	4.5V	2.5V	1.8V		
TSM12N02	N	20	±12	12	13	20	--	--	14.7	TO-252
TSM25N03	N	25	±20	25	13	20	--	--	14.7	TO-252
TSM35N03	N	25	±20	35	9	13	--	--	10	TO-252
TSM55N03	N	25	±20	55	6	9	--	--	16.8	TO-252
* TSM75N03	N	25	±20	75	4	6	--	--	33	TO-252
* TSM5NS50	N	500	±20	5	0.85Ω	--	--	--	13	TO-252
TSM1N60S	N	600	±30	0.3	15Ω	--	--	--	4.5	TO-92
TSM1N60L	N	600	±30	1	12Ω	--	--	--	4.5	TO-252, TO-251
TSM1N60	N	600	±30	1	8Ω	--	--	--	8.5	TO-252, TO-251
TSM2N60	N	600	±30	2	4.4Ω	--	--	--	9.5	TO-252, TO-251

P-Channel

* TSM2323	P	- 20	±8	-4.7	--	39	52	68	12.5	SOT-23
TSM2311	P	- 20	±8	-3.5	--	55	85	--	8.5	SOT-23
TSM2301B	P	- 20	±8	-2.4	--	100	150	190	4.5	SOT-23
TSM2301	P	- 20	±8	-2.3	--	130	190	--	4.5	SOT-23
TSM2313	P	- 20	±12	-3.3	--	70	90	130	8	SOT-23
TSM3401	P	- 30	±20	-3.0	60	90	--	--	9.5	SOT-23
* TSM3433	P	- 20	±8	-5.6	--	42	57	80	8.5	SOT-26
TSM3441	P	- 20	±8	-2.9	--	90	110	--	4.5	SOT-26
* TSM3911D	Dual P	- 20	±8	-2.2	--	130	190	250	4.5	SOT-26
TSM3443	P	- 20	±12	-4.4	--	65	100	--	8.5	SOT-26
* TSM3481	P	- 30	±20	-5.3	48	79	--	--	16	SOT-26
TSM3457	P	- 30	±20	-5.0	60	100	--	--	9.5	SOT-26
* TSM9434	P	- 20	±8	-6.5	--	40	60	--	12.5	SOP-8
* TSM9434D	Dual P	- 20	±8	-6.5	--	40	60	--	12.5	SOP-8
* TSM4433	P	- 20	±8	-3.9	--	90	110	150	4.5	SOP-8
* TSM4433D	Dual P	- 20	±8	-3.9	--	90	110	150	4.5	SOP-8
* TSM9433	P	- 20	±12	-5.4	--	55	75	--	8.5	SOP-8
* TSM9933D	Dual P	- 20	±12	-5.0	--	65	85	--	8.5	SOP-8
* TSM4435	P	- 30	±20	-9.1	20	35	--	--	33	SOP-8
* TSM4925D	Dual P	- 30	±20	-7.1	25	41	--	--	33	SOP-8
* TSM4431	P	- 30	±20	-5.8	40	70	--	--	16	SOP-8
TSM9435	P	- 30	±20	-5.0	60	90	--	--	9.5	SOP-8
* TSM4835	P	- 30	±25	-9.6	18	30	--	--	25	SOP-8
* TSM4415	P	- 30	±25	-8	35	--	--	--	16	SOP-8
TSM4953D	Dual P	- 30	±20	-5.0	60	90	--	--	9.5	SOP-8
* TSM6981D	Dual P	- 20	±8	-6.5	--	40	50	60	12.5	TSSOP-8

Note D: Dual Channel

Remark: * Available in 2007/Q1

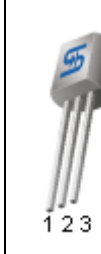
Transistor

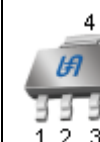
Part# (Remark)	Type	V _{CEO} (max)	V _{CBO} (max.)	V _{EBO} (max.)	I _C (max.)	Hfe	V _{CE(SAT)} (max)	Pin Style	Package
TSB1412	PNP	- 20V	- 30V	- 6V	-5A	80~820	-1.0V	BCE	TO-252
TSD2118	NPN	20V	30V	6V	5A	120~820	1.0V	BCE	TO-252
TSB1386	PNP	- 20V	- 30V	- 6V	-5A	80~820	-1.0V	BCE	SOT-89
TSD2098	NPN	20V	30V	6V	5A	120~820	1.0V	BCE	SOT-89
TSB32C	PNP	- 100V	- 100V	-5V	-3A	10~50	-1.2V	BCE	TO-252
TSD31C	NPN	100V	100V	5V	3A	10~50	1.2V	BCE	TO-252
TSB1184A	PNP	- 50V	- 50V	-5V	-3A	100~390	-0.5V	BCE	TO-252
TSD1760	NPN	30V	40V	-5V	-3A	100~390	-0.5V	BCE	TO-252
TSB772	PNP	- 50V	- 50V	-5V	-3A	160~500	-0.5V	ECB	TO-126
TSD882	NPN	30V	40V	5V	3A	160~500	0.5V	ECB	TO-126
TSB772S	PNP	- 50V	- 50V	-5V	-3A	160~500	-0.5V	ECB	TO-92
TSD882S	NPN	30V	40V	5V	3A	160~500	0.5V	ECB	TO-92
TSB1424	PNP	- 50V	- 50V	- 5V	-3A	120~560	-0.5V	BCE	SOT-89
TSD2150	NPN	30V	40V	5V	3A	120~560	0.5V	BCE	SOT-89
TSB1132	PNP	- 30V	- 40V	-5V	-1A	82~560	-0.5V	BCE	SOT-89
TSD1664	NPN	30V	40V	5V	1A	82~560	0.5V	BCE	SOT-89
TSB1590	PNP	- 20V	- 30V	-5V	-1A	82~560	-0.5V	BEC	SOT-23
TSD2444	NPN	20V	30V	5V	1A	82~560	0.5V	BEC	SOT-23
TSA1036	PNP	- 30V	- 40V	-5V	-0.6A	82~560	-0.5V	BEC	SOT-23
TSC2411	NPN	40V	60V	5V	0.6A	82~560	0.5V	BEC	SOT-23
TS13001	NPN	400V	400V	7V	0.1A	10~40	0.5V	ECB	TO-92
TS13002	NPN	400V	700V	9V	0.2A	6~30	2.5V	ECB	TO-92
TS13002A	NPN	400V	700V	9V	0.3A	20~40	1.5V	ECB	TO-92
* TS13002HV	NPN	500V	900V	9V	0.3A	20~40	1.5V	ECB	TO-92
TS13003	NPN	400V	700V	9V	1.5A	20~40	3.0V	ECB	TO-92, TO-126
TS13003A	NPN	430V	800V	9V	1.5A	20~40	3.0V	ECB	TO-92
TS13003B	NPN	400V	700V	9V	1.5A	20~40	3.0V	ECB	TO-92
TS13003HV	NPN	530V	900V	9V	1.5A	15~40	3.0V	ECB	TO-92
TS13005	NPN	400V	700V	9V	4A	10~25	1.0V	BCE	TO-220, ITO-220
TS13007	NPN	400V	700V	9V	8A	8~40	3.0V	BCE	TO-220
TS13007B	NPN	400V	700V	9V	8A	25~50	3.0V	BCE	TO-220
TS13009	NPN	400V	700V	9V	12A	10~40	3.0V	BCE	TO-220
* TSC5301D	NPN	400V	700V	9V	1A	8~25	3.0V	ECB	TO-92
* TSC5302D	NPN	400V	700V	9V	2A	8~25	3.0V	BCE	TO-252, TO-251
* TSC5304D	NPN	400V	700V	9V	4A	8~25	3.0V	BCE	TO-252, TO-251
* TSC128D	NPN	400V	750V	9V	4A	8~25	3.0V	BCE	TO-220, TO-263
* TSC148D	NPN	400V	750V	9V	8A	8~25	3.0V	BCE	TO-220, TO-263

Note: Suffix D = integrated free-wheeling diode

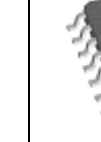
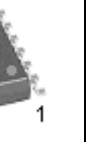
Remark: * Available in 2007/Q1

Package Type

TSC Code	CZ	CZ5	CZ7	CI	CI4	CH	CK	CT
	TO-220	TO-220-5L	TO-220-7L	ITO-220	ITO-220-4L	TO-251	TO-126	TO-92
Package								
	1 2 3	1 5	1 7	1 2 3	1 2 3 4	1 2 3	1 2 3	1 2 3

TSC Code	CM	CM5	CM7	CP	CP5	CW	CW4	CQ
	TO-263	TO-263-5L	TO-263-7L	TO-252	TO-252-5L	SOT-223	SOT-223-4L	DFN 3x3
Package								
	1 2 3	1 5	1 7	1 2 3	1 5	1 2 3	1 2 3	TSM7900 xxx

TSC Code	CY	CY5	CX	CX5	CX6	CU	CU5	CU6
	SOT-89	SOT-89-5	SOT-23	SOT-25	SOT-26	SOT-323	SOT-353	SOT-363
Package								
	1 2 3	1 2 3	1 2	1 2 3	1 2 3	1 2	1 2 3	1 2 3

TSC Code	CS	CS14	CS16	CD	CD14	CD16
	SOP-8	SOP-14	SOP-16	DIP-8	DIP-14	DIP-16
Package						
	8 1	14 1	16 1	8 1	14 1	16 1

EXCELLENCE IN PRODUCT QUALITY

Taiwan Semiconductor Co., Ltd. (TSC), founded in January 1979 at Tu Chen Hsian, Taipei Hsien, Taiwan. The corporation specializes in manufacturing rectifiers, analog ICs and MOSFETs, an essential component operating within home electrical appliances, communication & information products, equipment instruments, automobiles. Since its establishment, TSC has gained a worldwide reputation for its excellence in products quality.



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