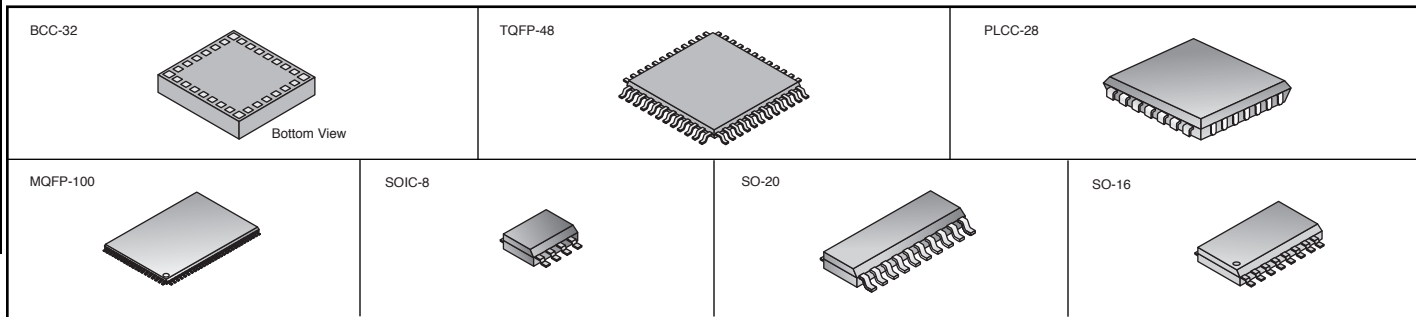


SUPERTEX Analog Integrated Circuits



Analog ICs

Supertex



◆ Surface Mount Device

SUPERTEX HIGH VOLTAGE ANALOG SWITCH/MULTIPLEXER INTEGRATED CIRCUITS

These are low charge injection 8 or 16-channel high-voltage analog switch integrated circuit (IC) intended for use in applications requiring high voltage switching controlled by low voltage control signals, such as ultrasound imaging and printers.

Features:

- HVCMS technology for high performance
- Very low quiescent power dissipation-10µA
- Output On-resistance typically 22 ohms
- Low parasitic capacitances
- DC to 10MHz analog signal frequency
- -60dB typical output off isolation at 5MHz
- CMOS logic circuitry for low power
- Excellent noise immunity
- On-chip shift register, latch and clear logic circuitry
- Flexible high voltage supplies
- Surface mount package available



RoHS Compliant

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package	Output Channels	Supply Voltage (V)	Analog Signal Voltage (V)	Switch Current (A)	Switch Resistance (Ω)	Power Dissipation @TA=25°C (W)	Peak Analog Signal Current/Channel	Output Bleed Resistors	Price Each			
											1	100	500	1000
◆ 689-HV2201B1-G	HV2201B1-G	BCC-32	8	200	180	±2	24	1.0	3	No	18.03	14.99	13.86	13.29
◆ 689-HV2201FG-G	HV2201FG-G	TQFP-48	8	200	180	±2	24	1.0	3	No	16.25	13.51	12.48	11.97
◆ 689-HV2201PJ-G	HV2201PJ-G	PLCC-28	8	200	180	±2	24	1.2	3	No	14.78	12.29	11.36	10.89
◆ 689-HV2301B1-G	HV2301B1-G	BCC-32	8	200	180	±2	24	1.0	3	Yes	18.92	15.74	14.54	13.94
◆ 689-HV2301FG-G	HV2301FG-G	TQFP-48	8	200	180	±2	24	1.0	3	Yes	17.06	14.19	13.11	12.57
◆ 689-HV2301PJ-G	HV2301PJ-G	PLCC-28	8	200	180	±2	24	1.2	3	Yes	15.50	12.89	11.91	11.42
◆ 689-HV20220PJ-G	HV20220PJ-G	PLCC-28	8	200	180	±2	24	1.2	3	No	16.51	13.73	12.69	12.17
◆ 689-HV232PJ-G	HV232PJ-G	PLCC-28	8	200	180	±2	24	1.2	3	Yes	17.08	14.20	13.13	12.59
◆ 689-HV2601FG-G	HV2601FG-G	TQFP-48	16	200	180	±2	24	1.0	3	No	32.51	27.03	24.98	23.95
◆ 689-HV2701FG-G	HV2701FG-G	TQFP-48	16	200	180	±2	24	1.0	3	Yes	34.12	28.38	26.22	25.14

SUPERTEX HIGH VOLTAGE ARRAY AMPLIFIER INTEGRATED CIRCUITS (MEMS DRIVER ICS)

HV25x family of high voltage amplifiers is designed for the next generation of Micro Electro Mechanical Systems (MEMS). The family features 32-channel non-inverting high voltage Amplifier Arrays capable of output swings up to 295V. To minimize external components, the amplifiers have fixed internal closed loop gain setting resistors. Supertex is the industry's first company to combine an array of low voltage sample-and-hold circuits with high voltage amplifiers on the same chip.

• For Evaluation/Design Shortcut see Demo Boards

* Sample-and-hold amplifier array

Demo Boards

- IC Included
- RoHS: non-compliant / Contains Pb

MOUSER STOCK NO.	Price Each
689-HV254DB1	176.00
689-HV256DB1	254.00

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package	Channels	Voltage HV _{OUT} Max. (V)	Quiescent Current I _{PP} /Chan-Typ	Slew Rate Typ. (V/µs)	Closed Loop Gain (V/V)	Feedback Resistance (MΩ)	HV _{OUT} Current Capability-Max.			Output Current Limit	Price Each			
									Source (µA)	Sink (µA)	Cap Load (pF)		1	100	500	1000
◆ 689-HV254FG	HV254FG	MQFP-100	32	250	44	3	50	12	300	300	100	No	132.11	109.86	101.51	97.34
◆* 689-HV256FG-G	HV256FG-G	MQFP-100	32	295	15	2	72	12	500	500	3000	Yes	207.10	172.22	159.14	152.60
◆ 689-HV257FG	HV257FG	MQFP-100	32	295	15	2	72	12	500	500	3000	Yes	245.75	204.36	188.84	181.08

SUPERTEX ELECTRONIC LINE SWITCH INTEGRATED CIRCUITS

These electronic switch ICs are designed as a replacement for the typical mechanical hook switch or electromechanical relays in telephones and answering machines. Multiple low-level inputs are provided for design versatility and may be controlled directly from logic circuitry or from mechanical switches. These ICs are line-powered and are especially useful in applications that require telephone operation when external power is lost or otherwise unavailable.

• For Evaluation/Design Shortcut see Demo Boards



RoHS Compliant

Demo Boards

- IC Included
- RoHS: non-compliant / Contains Pb

MOUSER STOCK NO.	Price Each
689-HT18DB1	50.00
689-HT19DB1	50.00

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package	Breakdown Voltage V _{TPG} (V)	Switch Resistance (Ω)	Output Voltage V _{TP}		I _{TPG} Current Limiting		Input Voltage	Price Each
					Min. (V)	Max. (V)	Min. (mA)	Max. (mA)		
◆ 689-HT18LG-G	HT18LG-G	SOIC-8	350	18	16	20	200	300	20	1.41 1.17 1.08 1.04
◆ 689-HT19LG-G	HT19LG-G	SOIC-8	350	18	16	20	200	300	20	1.41 1.17 1.08 1.04
◆ 689-HT0638LG-G	HT0638LG-G	SOIC-8	375	18	---	20	188	313	10	2.22 1.85 1.71 1.64

SUPERTEX HIGH VOLTAGE RING GENERATOR INTEGRATED CIRCUITS

The use of Supertex's high voltage push-pull IC technology allows these products to control high voltage outputs without the use of step-up transformers. Use of class-D PWM amplifiers in these ICs allows very high efficiencies to be achieved. This is particularly important for short and medium loop telecommunication applications where central telephone office power is not available.

• For Evaluation/Design Shortcut see Demo Boards



RoHS Compliant

Demo Boards

- IC Included
- RoHS: non-compliant / Contains Pb

MOUSER STOCK NO.	Price Each
689-HV430DB3	150.00
689-HV440DB1	150.00
689-HV440DB2	150.00

For quantities of 2000 and up, call for quote.

MOUSER STOCK NO.	Supertex Part No.	Package	Max Ring Voltage (V) RMS	MAX Output Load REN	High Voltage Supplies		PWM Function	Power Supply Voltage		Price Each			
					Positive	Negative		Positive/Negative High Voltage Supply V _{PP1} =V _{NN1} (V)	Negative High Voltage Supply V _{NN1} (V)	1	100	500	1000
◆ 689-HV430WG-G	HV430WG-G	SO-20	105	50	YES	YES	External	325	---	7.71	6.41	5.93	5.68
◆ 689-HV440WG-G	HV440WG-G	SO-16	70	5 or 20	YES	YES	External	220	---	7.66	6.37	5.88	5.64

