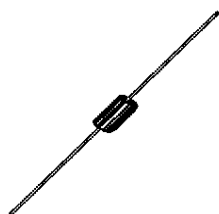




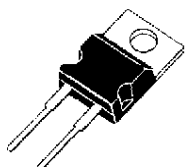
## RGB VIDEO OUTPUT TRANSISTORS

Device	V <sub>CEO</sub> (V)	V <sub>CB0</sub> V <sub>CES</sub> (V)	I <sub>c</sub> (A)	P <sub>tot</sub> (W)	Package	V <sub>CE(sat)</sub> @ I <sub>c</sub> / I <sub>B</sub>			t <sub>s</sub> (μs)	t <sub>f</sub> (μs)
						(V)	(mA)	(mA)		
VT120	200	200	0.10	8.4	SOT-32	-	-	-	-	-
BF457	160	160	0.30	12.5	SOT-32	1.0	50.0	10.0	-	-
BF458	250	250	0.30	12.5	SOT-32	1.0	50.0	10.0	-	-
BF459	300	300	0.30	12.5	SOT-32	1.0	50.0	10.0	-	-

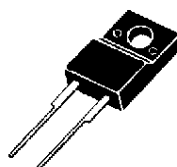
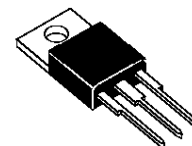
## HORIZONTAL DEFLECTION - DIODES FOR COLOR TV AND MONITORS



DO-201AD



TO220AC

ISOWATT220AC  
(Fully Isolated)

TO220I

## DAMPER DIODES

 $T_j(\text{max}) = 150^\circ\text{C}$ 

Device	$I_O$ (A)	$V_{RRM}$ (V)	(1) $V_F$ @ rated $V_{RRM}$ (V)	$I_R$ @ rated $V_{RRM}$ (mA)	(2) $t_{RR}$ (ns)	Package
DTV32-1500A	6	1500	1.2	1	600	TO220AC
DTV32-1500B	6	1500	1.4	1.4	175	
DTV64D	6	1500	1.4	1	135	
DTV82D	6	1500	1.3	1	125	
DTV110D	6	1500	1.5	1	115	
DTV32F-1500A	6	1500	1.2	1	600	ISOWATT220AC
DTV32F-1500B	6	1500	1.4	1.4	175	
DTV64F	6	1500	1.4	1	135	
DTV82F	6	1500	1.3	1	125	
DTV110F	6	1500	1.5	1	115	



## MODULATION DIODES

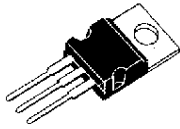
$T_j(\text{max}) = 150^\circ\text{C}$						
Device	$I_O$ (A)	$V_{RRM}$ (V)	(1) $V_F$ @ rated $V_{RRM}$ (V)	$I_R$ @ rated $V_{RRM}$ (mA)	(2) $t_{RR}$ (ns)	Package
MDV03-400	3	400	1.4	0.50	55	DO-201AD
MDV04-600	4	600	1.2	0.75	75	

## DAMPER + MODULATION DIODES FOR VIDEO

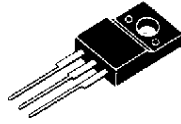
$T_j(\text{max}) = 150^\circ\text{C}$						
Device	$I_O$ (A)	$V_{RRM}$ (V)	(1) $V_F$ @ rated $V_{RRM}$ (V)	$I_R$ @ rated $V_{RRM}$ (mA)	(2) $t_{RR}$ (ns)	Package
<b>DMV32A</b>						TO220AB
• Damper diode	1500	6	1.2	1	175	
• Modulation diode	600	5	1.2	0.75	80	
<b>DMV32B</b>						TO220AB
• Damper diode	1500	6	1.3	1.4	175	
• Modulation diode	600	5	1.2	0.75	80	



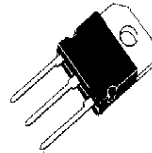
**DEFLECTION - TRANSISTORS**



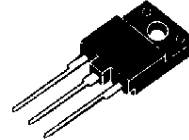
TO-220



ISOWATT220  
(Fully Isolated)



SOT-93

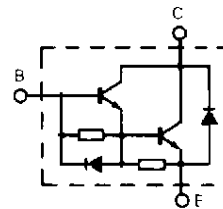
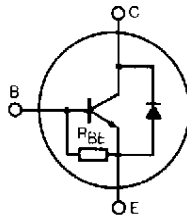
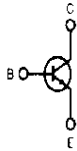


ISOWATT218  
(Fully Isolated)



TO-3

Internal schematic diagrams



**HORIZONTAL DEFLECTION  
POWER BIPOLAR TRANSISTORS & DARLINGTONS**

Device	V <sub>CEO</sub> (V)	V <sub>CBO</sub> (V)	I <sub>C</sub> (A)	P <sub>tot</sub> (W)	Package	TYPICAL APPLICATION	
						Colour Television screen size	Monitor size/type/frequency
BU808DFI	700	1400	8.0	52	ISOWATT218	up to 21"	
BUH315	700	1500	6.0	44	ISOWATT218	up to 17"	
BUH315D	700	1500	6.0	44	ISOWATT218	up to 17"	
THD218DHI	700	1500	7.0	50	ISOWATT218	up to 25"	
BU508AFI	700	1500	8.0	50	ISOWATT218	up to 25"	
BU508DFI	700	1500	8.0	50	ISOWATT218	up to 25"	
BUH515	700	1500	8.0	50	ISOWATT218	up to 25"	14" / SVGA / <50 KHz
BUH515D	700	1500	8.0	50	ISOWATT218	up to 25"	
S2000AFI	700	1500	8.0	50	ISOWATT218	up to 25"	
THD277HI	700	1500	8.0	50	ISOWATT218	up to 25"	14" / SVGA / <50KHz
BUH615D	700	1500	8.0	55	ISOWATT218	up to 25"	
THD215HI	700	1500	8.0	57	ISOWATT218		14" / Multisync / <64KHz
THD200FI	700	1500	10.0	57	ISOWATT218	> 25"	15" / Multisync / >64KHz
BUH1015HI	700	1500	10.0	70	ISOWATT218	> 25"	17" / Multisync / >64KHz
BUH1015	700	1500	14.0	160	TO-218	> 25"	17" / Multisync / >64KHz
BUH1215	700	1500	16.0	200	TO-218		21" / Multisync / >64KHz
BUH2M20AP	1200	2000	0.03	40	TO-220	DYNAMIC FOCUS	DYNAMIC FOCUS

Suffix D or DFI or DHI = integrated free-wheeling diode



# TV, MONITORS AND VCR CIRCUITS

## SWITCH MODE POWER SUPPLIES POWER BIPOLAR TRANSISTORS

Type	V <sub>CEO</sub> (V)	V <sub>CBO</sub> V <sub>CES</sub> (V)	I <sub>c</sub> (A)	P <sub>tot</sub> (W)	Package	V <sub>CE(sat)</sub> @ I <sub>c</sub> / I <sub>B</sub>			Resistive Switching	
						(V)	(A)	(A)	t <sub>s</sub> typ (μs)	t <sub>f</sub> typ (μs)
SGSIF461	400	850	15	57	ISOWATT218	1.5	10	2.0	1.0	0.15
BUF410	450	850	15	125	SOT-93	0.5 #	10	2.0	1.9 ♦	0.06 ♦
BUF420	450	850	30	200	SOT-93	0.5 #	20	4.0	1.1 ♦	0.05 ♦
BUF420M	450	850	30	200	TO-3	0.5 #	20	4.0	1.0 ♦	0.05 ♦
BUX87	450	1000	0.5	40	SOT-32	1.0	0.2	0.02	4.5	0.5
SGSF313PI	450	1000	5	35	ISOWATT220	0.75	2.5	0.5	1.1	0.13
BUF405AFI	450	1000	7.5	40	ISOWATT220	0.5	5	1	1.8	0.1
BUF405A	450	1000	7.5	80	TO-220	0.5 #	5.0	1.0	0.8 ♦	0.05 ♦
SGSF463	450	1000	12	125	SOT-93	1.5	7.0	1.4	1.0	0.15
BUF410A	450	1000	15	125	SOT-93	0.5 #	10	2.0	1.9 ♦	0.06 ♦
BUF420A	450	1000	30	200	SOT-93	0.5 #	20	4.0	1.0 ♦	0.05 ♦
BUL310PI	500	1000	5	35	ISOWATT220	1.1	3.0	0.6	1.2 ♦	0.08 ♦
SGSF324	600	1200	4	70	TO-220	1.5	1.75	0.35	1.0	0.5
SGSIF344	600	1200	7	40	ISOWATT220	1.5	3.5	0.7	1.0	0.2
SGSIF444	600	1200	7	50	ISOWATT218	1.5	3.5	0.7	1.5	0.2
SGSF344	600	1200	7	85	TO-220	1.5	3.5	0.7	1.0	0.2
BUH315	700	1500	6	44	ISOWATT218	1.5	3.0	0.75	1.6	0.11
THD277HI	700	1500	8	50	ISOWATT218	0.9	4.0	1.0	2.1	0.14

# Type

♦ Induct. load



## DEFLECTION - ICs

## VERTICAL DEFLECTION

Type	Description	Package
TDA1175P	Low Noise Complete System for Monitors	POWERDIP16
TDA1675A	Complete System for Monitors	MULTIWATT
TDA1771	Complete System for Small Screen Color TV with Ramp Generator	SIL10
TDA8170	Power Output for Color TV	HEPTAWATT
TDA8171	Power Output for Color TV	HEPTAWATT
TDA8172	Power Output for Color TV & Monitors	HEPTAWATT
TDA8174	Power Output for Color TV with Ramp Generator	MULTIWATT
TDA8174A	Power Output for Color TV with Ramp Generator	MULTIWATT
TDA8177	Power Output for Color TV & Monitors	HEPTAWATT
TDA8177F	Power Output for Color TV & Monitors	HEPTAWATT
TDA9302H	Low Cost Power Output for Color TV & Monitors	HEPTAWATT
TDA9309	Low Cost Power Output for Color TV & Monitors	HEPTAWATT
STV9379A	Power Output for High Performance Monitors and TV	HEPTAWATT
STV9379FA	Power Output for High Performance Monitors and TV	HEPTAWATT

## HORIZONTAL DRIVERS

Type	Description	Package
TDA8140	Power Transistor Driver for Color TV	POWERDIP
TDA8143	Power Transistor Driver for Color TV	SIP9

## HORIZONTAL AND VERTICAL DEFLECTION PROCESSORS

Type	Description	Package
TDA9103S	H/V Deflection Processor for Multifrequencies Monitors	SDIP42
TDA8214B	H/V Processor for Low Cost TV	DIP20
TDA8215B	H/V Processor with Darlington Drive for Low Cost TV	DIP20
TDA9102C/F	H/V Deflection Processor for Multifrequencies Monitors	DIP20
TDA9105A	H/V Deflection Processor for High-end Multifrequencies Monitors	SDIP42
TDA9105S	H/V Deflection Processor for High-end Multifrequencies Monitors	SDIP42
TDA9106	H/V I <sup>2</sup> C Controlled High-end Deflection Processor for Monitors	SDIP42
TDA9106A	H/V I <sup>2</sup> C Controlled High-end Deflection Processor for Monitors	SDIP42
TDA9109	H/V I <sup>2</sup> C Controlled High-end Deflection Processor for Monitors	SDIP32
TDA9110	H/V I <sup>2</sup> C Controlled High-end Deflection Processor for Monitors	SDIP32
TEA2037A	H/V Deflection Circuit for Low Cost Monitors and B&W TV	BATWING DIP16
TEA2130	H/V Deflection With Automatic VCR Switching	DIP20
STV7778S	H/V Deflection Processor for Low-end Multifrequencies Monitors	SDIP42

**DEFLECTION - ICs (cont'd)****EAST/ WEST CORRECTION**

Type	Description	Package
TDA4950	E/W Parabolic and Keystone Correction	MINIDIP
TDA8145	E/W Square CRT Parabolic and keystone Correction	MINIDIP
TDA8146	E/W Parabolic and keystone Correction with Adjustable Parabolic shape	MINIDIP
TEA2031A	E/W Parabolic and Keystone Correction	MINIDIP
STV2145	I <sup>2</sup> C Bus Controlled East/West and Vertical Interface	DIP16

**WIDE BAND VIDEO PREAMPLIFIER**

Type	Description	Package
TDA9203A/B	Tripple Channel 80MHz Video Preamplifier (DC Ctrl) for Monitors	SDIP24
TDA9205	Tripple Channel 130MHz Video Preamplifier (DC Ctrl) for Monitors	SDIP24
TDA9206	Tripple Channel 130MHz Video Preamplifier (DC Ctrl) for Monitors	SDIP24

**HIGH VOLTAGE VIDEO AMPLIFIER**

Type	Description	Package
STV5112	3-Channel RGB High Voltage Video Amplifier	MULTIWATT
TDA9501	Mono Channel 100V, 100Mpix/sec Video Amplifier (monitor)	PENTAWATT
TEA5101B	3-Channel RGB High Voltage Video Amplifier	MULTIWATT
TDA9511	Mono Channel 100V, 100Mpix/sec Video Amplifier (monitor)	PENTAWATT
TDA9502	Triple Channel 100V, 100 Mpix/sec Video Amplifier (monitor)	MULTIWATT15

**VIDEO AND SOUND IF**

Type	Description	Package
STV8223B	Video & Sound IF System with AV Switches	SDIP24
STV8224B	Video & Sound IF System with AV Switches	SDIP24
STV8225	AM Sound IF Processor	DIP14

**TV SIGNAL PROCESSING**

Type	Description	Package
STV2040	Digital Convergence for projection CTV	SDIP56
STV2102B	Pal Decoder, Video Processor and H/V deflection processor	SDIP42
STV2110B	Pal Secam Decoder, Video Processor and H/V deflection processor	SDIP42
STV2112B	I <sup>2</sup> C Bus Controller PAL/SECAM Complete TV Processor	SDIP42
STV2116A	I <sup>2</sup> C Bus Controller PAL/NTSC Complete TV Processor	SDIP42
STV2118B	I <sup>2</sup> C Bus Controller PAL/SECAM/NTSC Complete TV Processor	SDIP42
STV2151B	High End Multistandard Chroma Decoder, Integrated Luma and Chroma Filters	SDIP30
STV2161	Bus-Controlled Combined Deflection, Picture Improvement and Video Processor	SDIP56
STV2162	Combined Video and Deflection Processor for 100Hz CTV	SDIP30
STV2165	Picture Signal Improvement for 2H CTV	SDIP30
STV2216	I <sup>2</sup> C Bus-Controlled NTSC/PAL Complete TV Processor	SDIP42



## VIDEO AND SOUND SWITCHES

Type	Description	Package
TDA8198	Dual Audio Switch + DC Volume Control	DIP14
TDA8199	Dual DC Volume Control	DIP8
TEA2014A	Video Switch for Low Cost Solution	DIP8
TEA2114	Large Band Video Switch - Two Video Outputs - Compatible with TEA2014A	DIP8
TEA2124	Large Band Video Switch - Two Video Outputs (6dB gain)	DIP8
TEA5114A	Three Channels Switching (RGB)	DIP16
TEA5116	Five Video Switch And RGB Selection	DIP18
TEA6415C	I <sup>2</sup> C Controlled Video Matrix Switch	DIP20
TEA6420	I <sup>2</sup> C Bus Controlled Audio Matrix	SDIP24
TEA6422	I <sup>2</sup> C Controlled Audio Matrix Switch	SDIP24
STV6400	Double SCART Interface	DIP20
STV6400D	Double SCART Interface	SO20
STV6410D	Audio/Video Switch Matrix	TQFP64
STV6408	I <sup>2</sup> C Bus Controlled Video Matrix Switch	PQFP44
TEA6415CD	I <sup>2</sup> C Bus Controlled Video Matrix Switch	SO20
TEA6420D	I <sup>2</sup> C Bus Controlled Audio Matrix	SO28
TEA6422D	I <sup>2</sup> C Bus Controlled Video Matrix Switch	SO28
TEA6425	I <sup>2</sup> C Bus Controlled Video Matrix Switch	DIP20
TEA6430	I <sup>2</sup> C Bus Controlled Audio Matrix Switch	SDIP24

## REMOTE CONTROL

Type	Description	Package
M3004LAB1	RC Transmitter 64 Commands	DIP20
M3004LD	RC Transmitter 64 Commands	SO20





## VIDEO RECORDER CIRCUITS

Type	Description	Package
STV5712D	FM Audio Head Amplifier	SO16
STV5725D	4 Video Head Amplifier With TRIV and AGC	SO20
STV5727D	2 Video Head Amplifier With TRIV and AGC	SO14N
STV5728D	4 Video + 2 HIFI Head Amplifier With AGC TRIV and AGC	SO28
STV5742D	2 Video Head Amplifier With TRIV and AGC	SO16N
STV5744AD	4 Video Head Amplifier With TRIV and AGC	SO20

## SWITCH MODE POWER SUPPLY

Type	Description	Package
TEA2018A	Fixed Frequency Controller	DIP8
TEA5170	Master Slave, Secondary Controller	DIP8
TEA2261	Primary Controller for Master Slave With Analog Switch Off	DIP16
TEA2262	Primary Controller for Master Slave With Analog Switch Off for MOS Transistor	DIP16
TDA4605	Low cost free running frequency SMPS MOS Transistor	DIP8

## TELETEXT DECODER

Type	Description	Package
STV5347	Teletext Decoder, with Digital Data Slicer and 4 Pages Memory On-Chip	DIP28
STV5348	Teletext and VPS Decoder, Digital Data Slicer and 8 Pages Memory On-Chip	DIP28
STV5348D	Teletext and VPS Decoder, Digital Data Slicer and 8 Pages Memory On-Chip	SO28
STV5348H	Teletext and VPS Decoder, Digital Data Slicer and 8 Pages Memory On-Chip	SO28
STV5348T	Teletext and VPS Decoder, Digital Data Slicer and 8 Pages Memory On-Chip	SO28

## NICAM

Type	Description	Package
TDA8204B	Nicam Decoder	SDIP42
TDA8205	QPSK Demodulator	SDIP42

## GRAPHIC

Type	Description	Package
STV9410	Graphic Display Processor for CRT and LCD	DIP20 - SO24
STV9422 (1)	Multisynch 40MHz Pixel Clock OSD Monitor + 8 DACs Outputs	SDIP24
STV9424 (1)	Multisynch 40MHz Pixel Clock OSD Monitor	DIP16
STV9425 (1)	Multisynch 50MHz Pixel Clock OSD Monitor + 8 DACs Outputs	SDIP24
STV9425B (1)	Multisynch 50MHz Pixel Clock OSD Monitor + 4 DACs Outputs	SDIP24
STV9426 (1)	Multisynch 50MHz Pixel Clock OSD Monitor	DIP16
STV9427 (2)	Multisynch 80MHz Pixel Clock OSD Monitor	DIP16
STV9428 (2)	Multisynch 80MHz Pixel Clock OSD Monitor + 4 DACs Outputs	DIP20
STV9429 (2)	Multisynch 80MHz Pixel Clock OSD Monitor + 8 DACs Outputs	DIP24

(1) 128 characters + 24 user definable characters

(2) 256 characters + multilanguage + 16 user definable characters

## LED DISPLAY DRIVERS

Type	Description	Package
M5450B7	34 Outputs/15mA	DIP40
M5451B7	35 Outputs/15mA	DIP40
M5480B7	3.5 Digit (23 Segments)	DIP28
M5481B7	2 Digit (14 Segments)	DIP28
M5451Q	2 Digit (14 Segments)	PLCC44
M5482B7	2 Digit (15 Segments)	DIP20

## VOLTAGE REGULATORS

Type	Description	Package
TDA8132	5.1V +12V Dual Disable Voltage Regulator	HEPTAWATT
TDA8137	Dual 5.1V Regulator with Disable	HEPTAWATT
TDA8138	5.1V +12V Regulator with Disable and Reset	SIP9
TDA8138A	5.1V +12V Regulator with Disable	HEPTAWATT
TDA8138B	5.1V +12V Regulator with Reset	HEPTAWATT
TDA8139	5.1V and Adjustable Voltage Regulator with Disable and Reset	SIP9
TDA8133	5.1V +8V Regulator with Disable and Reset	SIP9



## TV, MONITORS & VCR CIRCUITS

### SATELLITE PAY TV

Type	Description	Package
STV0030	Video and Stereo Audio Processor for Satellite	PQFP64
STV0042A	Video and Stereo Audio Processor for Satellite	SDIP42
STV0056	Video and Stereo Audio Processor for Satellite	SDIP56
STV0056A	Video and Stereo Audio Processor Satellite with WEGNER PANDA System	SDIP56
STV0116	PAL/NTSC Digital Encoder	PLCC44
STV0117	PAL/NTSC Digital Encoder Macrovision Anticopy	PLCC44
STV0117A	PAL/NTSC Digital Encoder Macrovision Anticopy	PLCC44
STV0118	PAL/NTSC High Performance Digital Encoder	SO28
STV0119	PAL/NTSC High Performance Digital Encoder	SO28
STV0119A	PAL/NTSC High Performance Digital Encoder	SO28
STV0180	High Resolution 8-bit ADC	SO28
STV0190	Dual 6-bit ADC	SO28
STV0196B	QPSK/BPSK Demodulator and Forward Error Corrector (FEC) IC	PQFP64
STV5730A	Multistandard On-Screen Display	SO28
PTV110	Video Descrambler	SDIP42
PTV111	Pay TV Sync Separator	DIP20

### TRIPLE DAC

Type	Description	Package
STV8438CV	8-Bit Triple DAC with Analog Switch	PQFP44

### VIDEO AMPLIFIER

Type	Description	Temperature range (C)	Package
TSH10ID	High Speed 140MHz Amplifier Low Noise	-40 to 105	SO8
TSH10IN	High Speed 140MHz Amplifier Low Noise	-40 to 105	DIP8
TSH11ID	High Speed 120MHz Amplifier Mos Input	-40 to 105	SO8
TSH11IN	High Speed 120MHz Amplifier Mos Input	-40 to 105	DIP8
TSH22ID	Dual High Speed 25MHz Amplifier - Bipolar Input Supply Voltage 3-30V	-40 to 125	SO8
TSH22IN	Dual High Speed 25MHz Amplifier - Bipolar Input Supply Voltage 3-30V	-40 to 125	DIP8
TSH94ID	Quad with Standard Mode - Low Cost Amplifier - 150MHz	-40 to 125	SO16
TSH94IN	Quad with Standard Mode - Low Cost Amplifier - 150MHz	-40 to 125	DIP16
TSH150CD	High Speed 150MHz Amplifier Bipolar Input	0 to 70	SO8
TSH150CN	High Speed 150MHz Amplifier Bipolar Input	0 to 70	DIP8
TSH150ID	High Speed 150MHz Amplifier Bipolar Input	-40 to 105	SO8
TSH150IN	High Speed 150MHz Amplifier Bipolar Input	-40 to 105	DIP8
TSH151CD	High Speed 150MHz Amplifier Mos Input	0 to 70	SO8
TSH151CN	High Speed 150MHz Amplifier Mos Input	0 to 70	DIP8
TSH151ID	High Speed 150MHz Amplifier Mos Input	-40 to 105	SO8
TSH151IN	High Speed 150MHz Amplifier Mos Input	-40 to 105	DIP8
TSH31ID	High Speed 280MHz Amplifier Mos Input	-40 to 105	SO8
TSH31IN	High Speed 280MHz Amplifier Mos Input	-40 to 105	DIP8
TSH321ID	High Speed 300MHz Amplifier Mos Input	-40 to 105	SO8
TSH321IN	High Speed 300MHz Amplifier Mos Input	-40 to 105	DIP8