

Main applications

Consumer



AIR CONDITIONING
Motor Speed Control

SAFETY SYSTEMS
GFCI's
ALCI's

SECURITY SYSTEMS
Smoke Alarms
Intrusion Alarms
Electronic Locks

HEATING
Power Control
Airflow Controls

TELEVISION
Standby
Power Supply

HOME APPLIANCES
Motor Speed Control
Actuator Controls
Valve Controls
Safety Switches

FAN & COOLERS
Motor Speed Control

LIGHTING CONTROL
Dimmers
Security Lights
Electronic Ballast
Electronic Starters
Christmas Lights

- High Performance
- Excellent Quality
- High Reliability
- Excellent Service

Industrial



PROGRAM CONTROLLERS
Switches

PLC's

SOLID STATE RELAY
Switch

GAS IGNITION SYSTEM

SMALL ENGINE IGNITORS

HEATERS
Switches
Phase Controllers

MOTOR SPEED CONTROLLERS
Phase Controllers

PROXIMITY SWITCHES

FAN & COOLERS
Motor Speed Control

Automotive



ENGINE CONTROLS
Ignitors

SECURITY
Burglar Alarms

Data processing



POWER SUPPLIES
Automatic Voltage Switches
Protective Circuits

Fagor Electrónica's Thyristors offer you

The link between the micro-electronic control and the outside world is a Thyristor.



Electronics **THYRISTOR** Motor

THYRISTOR LINES

Thyristor lines



SCR

Sensitive Gate SCRs
Standard SCRs
Surface Mount SCRs



TRIAC

Logic Level TRIACs
Standard TRIACs
High Commutation TRIACs
Surface Mount TRIACs



DIAC

Standard DIAC
Surface Mount DIAC



Recognized worldwide for technological expertise, on-time deliveries, customer-driven service and total quality culture, Fagor Electrónica is ready to become your preferred supplier through our performance and commitment.

THYRISTORS

TRIACs
SCRs
DIACs



www.fagorelectronicas.com

MAY 2010

YOUR DEDICATED SPECIALIST MANUFACTURING DISCRETE SEMICONDUCTORS



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TO 92

Logic Level TRIACs

The Logic Level TRIACs series has been developed to provide very high switching performance with a low gate current drive (<10 mA), allowing direct drive from microcontrollers.

Standard TRIACs

Standard TRIACs are ideal for general purpose switching and phase control applications. Available with various gate sensitivities to fit many application requirements, they are used either as ON/OFF switches (in applications like washing machines, solid state relays, food processors, ...), or as variable load controllers (as in light dimmer, variable speed fans, hand tools etc.).

High Commutation TRIACs

In most applications High Commutation TRIACs do not need an RC snubber network thanks to their high commutation capability. Typical applications are motor control and other circuits with inductive loads.

Sensitive Gate SCR's

Sensitive Gate SCR's are easy to drive due to their very low gate current triggering. This high gate sensitivity allows direct triggering from the outputs of low power Microcontrollers or logic ICs, simplifying drive circuit design and reducing component and assembly cost. They are suitable for low power applications where low consumption is mandatory.

Standard Gate SCR's

Standard Gate SCR's use a high performance glass passivated technology. This general purpose family of Silicon Controlled Rectifiers is suitable for use in power supplies.

DIACs

A DIAC is a full-wave or bi-directional thyristor. It is used as a trigger diode with fixed voltage reference along with SCR's, TRIACs and Transistors.

DIACs

Package	Part Number	I _{max}		V _{to}		I _{to}
		mA	mA	V	V	
DO35	FDG201R	2	28	32	36	50
	FDG201M	2	30	32	35	15
	FDG201B	2	30	32	34	15
	FDG201W	2	28	32	36	100
MiniMELF	FDG201R	2	28	32	36	50
	FDG201M	2	30	32	35	15



SOT223



DPAK



D2PAK



IPAK



TO 126 / TO 225 AA



TO 220 AB & TO 220 AB INSULATED



TO 220 F



TO3P INSULATED



DO35



MiniMELF

TRIACs

Package	I _{TRMS} mA	V _{DRM} V _{RRM}	Logic Level TRIACs										Standard TRIACs				High Commutation TRIACs		
			Sensitivity I _{GT}																
			1-3 mA	3 mA	5 mA	5 mA	7 mA	10 mA	10 mA	25 mA	25 mA	50 mA	50 mA	25 mA	35 mA	50 mA	25 mA	35 mA	50 mA
TO92	1	200 / 800*	FT0102.A	FT0103.A	FT0104.A	FT0105.A	FT0107.A					FT0109.A	FT0110.A						
SOT223	1	200 / 800*	FT0102.N	FT0103.N	FT0104.N	FT0105.N	FT0107.N					FT0109.N	FT0110.N						
DPAK	4	200 / 800				FT0407.D	FT0408.D					FT0410.D	FT0411.D	FT0414.D	FT0416.D				
	8	200 / 800				FT0807.D	FT0808.D					FT0810.D	FT0811.D	FT0814.D	FT0816.D				
IPAK	4	200 / 800				FT0407.J	FT0408.J					FT0410.J	FT0411.J	FT0414.J	FT0416.J				
	8	200 / 800				FT0807.J	FT0808.J					FT0810.J	FT0811.J	FT0814.J	FT0816.J				
TO225AA	4	200 / 800				FT0405.K	FT0407.K	FT0408.K	FT0409.K			FT0410.K							
	8	200 / 800**				FT0804.G	FT0807.G		FT0809.G			FT0810.G	FT0813.G		FT0814.G				
D2PAK	12	200 / 800							FT1209.G			FT1210.G	FT1213.G		FT1214.G	FT1216.G			
	16	200 / 800							FT1609.G			FT1610.G	FT1613.G		FT1614.G	FT1616.G			
	25	200 / 800													FT2514.G	FT2516.G			
	4	200 / 800				FT0404.W	FT0405.W	FT0407.W	FT0408.W	FT0409.W		FT0410.W			FT0414.W				
	6	200 / 800					FT0605.W		FT0608.W	FT0609.W		FT0610.W	FT0618.W	FT0617.W	FT0611.W	FT0614.W	FT0616.W		
	8	200 / 800				FT0803.W		FT0807.W	FT0808.W	FT0809.W		FT0810.W	FT0818.W	FT0813.W	FT0817.W	FT0814.W	FT0816.W		
TO220F	10	200 / 800						FT1008.W	FT1009.W			FT1010.W	FT1018.W	FT1013.W	FT1017.W	FT1011.W			
	12	200 / 800				FT1204.W		FT1208.W	FT1209.W			FT1210.W	FT1218.W	FT1213.W	FT1217.W	FT1211.W	FT1214.W	FT1216.W	
	16	200 / 800						FT1608.W	FT1609.W			FT1610.W	FT1618.W	FT1613.W	FT1617.W	FT1611.W	FT1614.W	FT1616.W	
	25	200 / 800						FT2508.W					FT2517.W		FT2514.W	FT2516.W			
TO220AB	6	200 / 800				FT0404.H	FT0405.H	FT0407.H	FT0408.H	FT0409.H		FT0410.H			FT0411.H	FT0414.H			
	8	200 / 800				FT0803.H	FT0804.H	FT0807.H	FT0808.H			FT0810.H	FT0818.H	FT0813.H	FT0817.H	FT0811.H	FT0814.H	FT0816.H	
	10	200 / 800						FT1008.H				FT1010.H	FT1018.H	FT1013.H	FT1017.H	FT1011.H	FT1014.H	FT1016.H	
	12	200 / 800				FT1204.H		FT1208.H				FT1210.H	FT1218.H	FT1213.H	FT1217.H	FT1211.H	FT1214.H	FT1216.H	
	16	200 / 800						FT1608.H				FT1610.H	FT1618.H	FT1613.H	FT1617.H	FT1611.H	FT1614.H	FT1616.H	
	25	200 / 800										FT2510.H	FT2518.H	FT2513.H	FT2517.H	FT2514.H	FT2516.H		
	6	200 / 800				FT0604.J		FT0608.J				FT0610.J	FT0618.J	FT0617.J	FT0611.J	FT0614.J	FT0616.J		
	8	200 / 800				FT0804.J		FT0808.J				FT0810.J	FT0818.J	FT0817.J	FT0811.J	FT0814.J	FT0816.J		
TO220AB INSULATED	10	200 / 800						FT1008.J				FT1010.J	FT1018.J	FT1017.J	FT1011.J	FT1014.J	FT1016.J		
	12	200 / 800				FT1204.J		FT1208.J				FT1210.J	FT1218.J	FT1217.J	FT1211.J	FT1214.J	FT1216.J		
	16	200 / 800						FT1608.J				FT1610.J	FT1618.J	FT1617.J	FT1611.J	FT1614.J	FT1616.J		
	25	200 / 800										FT2510.J	FT2518.J	FT2517.J	FT2514.J	FT2516.J			
TO3P INSULATED	40	600/900										FT4018.P				FT4016.P			

SCRs

Package	I _{TRMS} mA	V _{DRM} V _{RRM}	Sensitive gate SCR's						Standard gate SCR's		
			Sensitivity I _{GT}								
			0.5 µA	1 µA	4 µA	15 µA	20 µA	200 µA	0.5 mA	2 mA	4 mA
	0.8	200 / 800	F50118.A	F50101.A	F50111.A	F50104.A	F50103.A	F50102.A			
TO92	0.8	400						XL0102.A			
	1.25	200 / 800		F50201.A	F50204.A	F50203.A	F50202.A				
SOT223	0.8	200 / 600	F50118.N	F50101.N	F50111.N	F50104.N	F50103.N	F50102.N			
	1.25	200 / 800		F50201.N	F50204.N	F50203.N	F50202.N				
DPAK	4	200 / 800		F50401.D	F50404.D	F50403.D	F50402.D				
	8	200 / 800					F50802.D	F50808.D	F50809.D		
	12	200/800							F51209.D		
IPAK	4	200/800		F50401.J	F50404.J	F50403.J	F50402.J				
	8	200 / 800					F50802.J	F50808.J	F50809.J		
TO225AA	4	200 / 800		F50401.K	F50404.K	F50402.K					
	12	200 / 800							F51209.G		
D2PAK	16	200 / 800							F51610.G		
	25	200 / 800							F52510.G		
	8	200 / 800						F50802.W	F50809.W		
TO220F	10	200 / 800							F51009.W		
	12	200 / 800							F51209.W		
	25	200 / 800							F52510.W	F52514.W	
TO220AB	6	200 / 800		F50401.H	F50404.H	F50402.H					
	8	200 / 800							F50609.H		
	10	200 / 800							F50809.H		
	12	200 / 800							F51009.H		
	16	200 / 800							F51208.H	F51209.H	
	25	200 / 800							F51610.H	F51614.H	
TO220AB INSULATED	16	200/800							F51610.J	F51614.J	
	25	200/800							F52510.J	F52514.J	
TO220 AB INSULATED	16	200/800							F51610.J	F51614.J	
	25	200/800							F52510.J	F52514.J	

* Group 02, 03, 04, 05, only 18 800V
** Group 04 only 600V