



UNISONIC Technologies Co., Ltd.

UTC Semiconductor
Professional Design

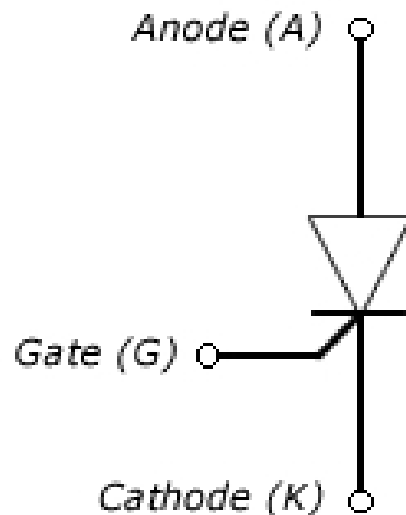
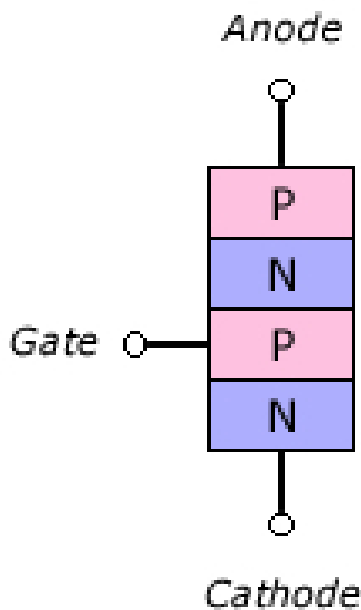
SCR & TRIAC Introduction

單向可控矽 & 三端雙向可控矽介紹

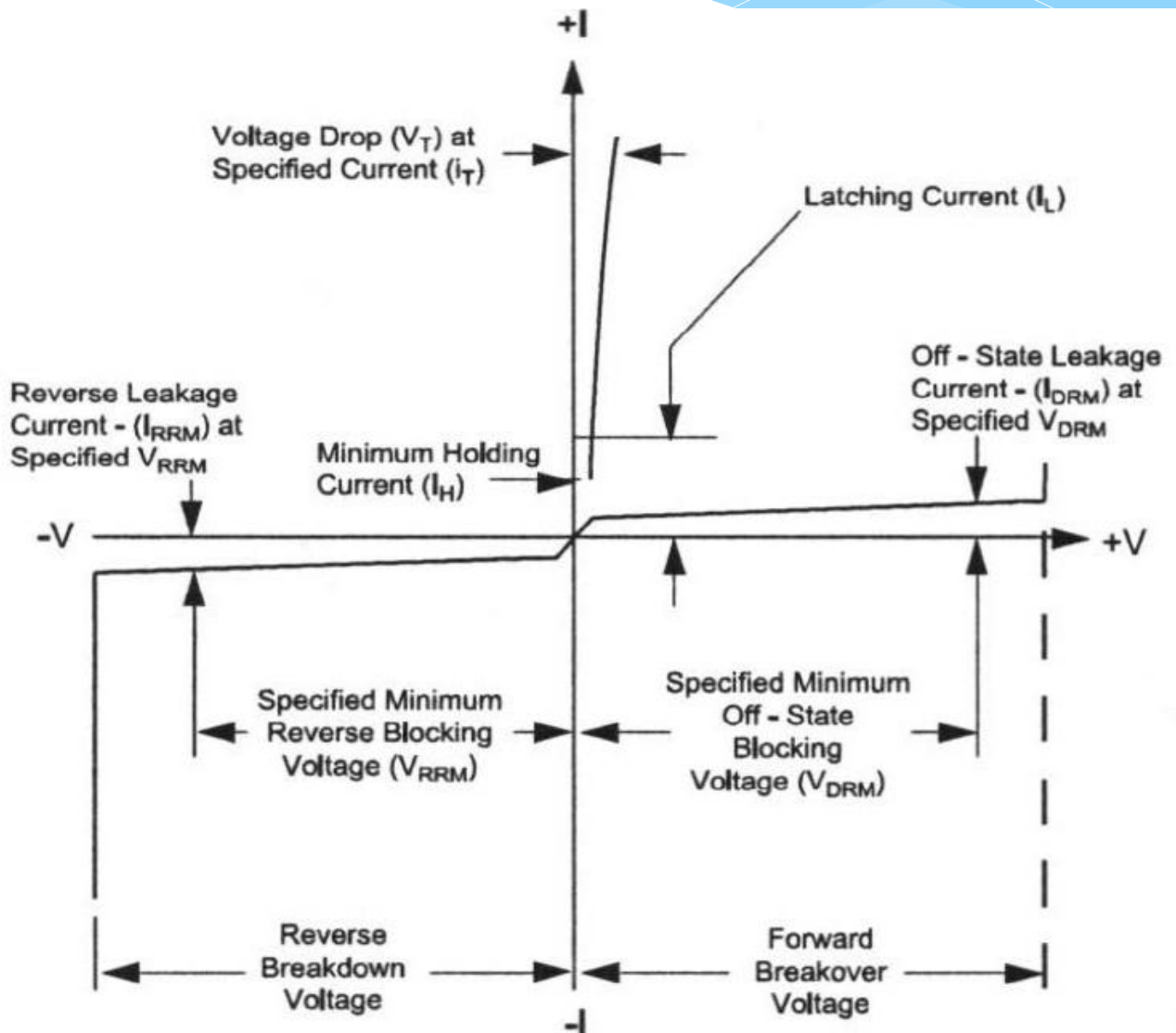


SCR(單向 可控矽) Introduction

矽控整流器 (Silicon Controlled Rectifier) 簡稱SCR(單向可控矽) 是一種四層三端點的閘流體元件，用以控制流到負載的電流。

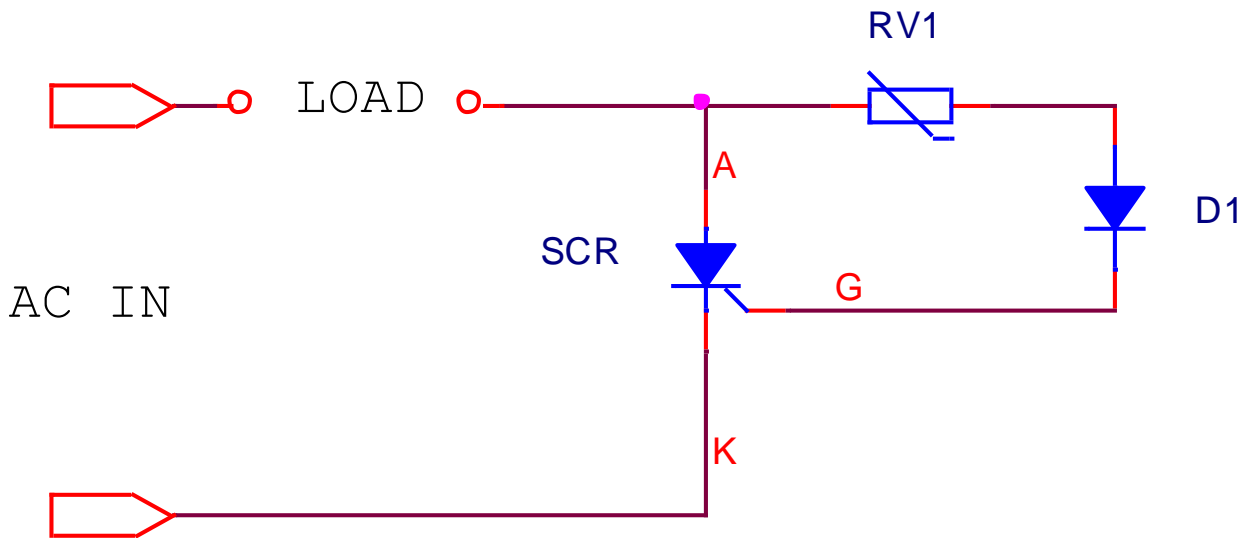


SCR(單向 可控硅) V-I Characteristics



SCR(單向 可控矽)Control Circuit

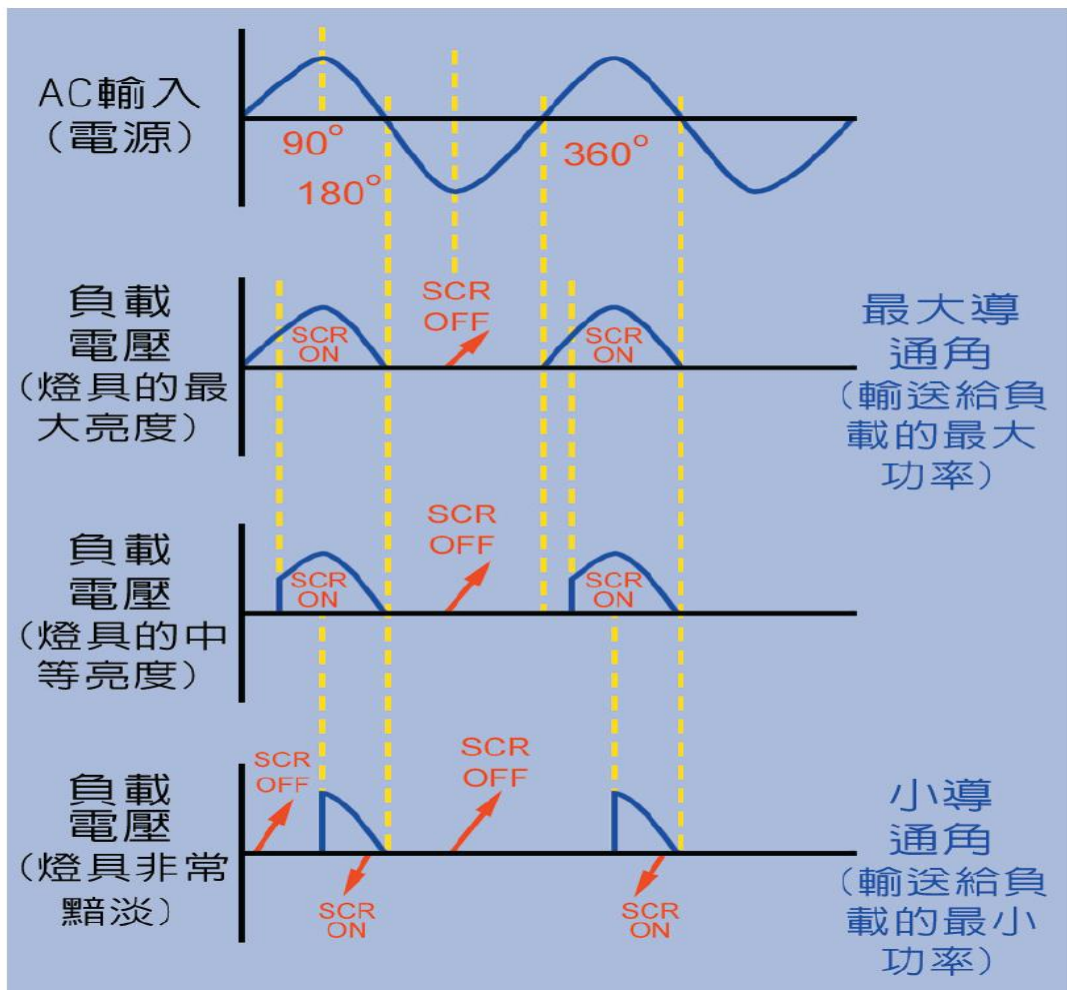
SCR(單向可控矽) 可控矽整流管 為單向元件，只在AC週期的一半導通。透過可變電阻RV1控制G端電流，在導通半週期中，可將SRC ON/OFF。



SCR(可控矽整流管) 半波控制電路

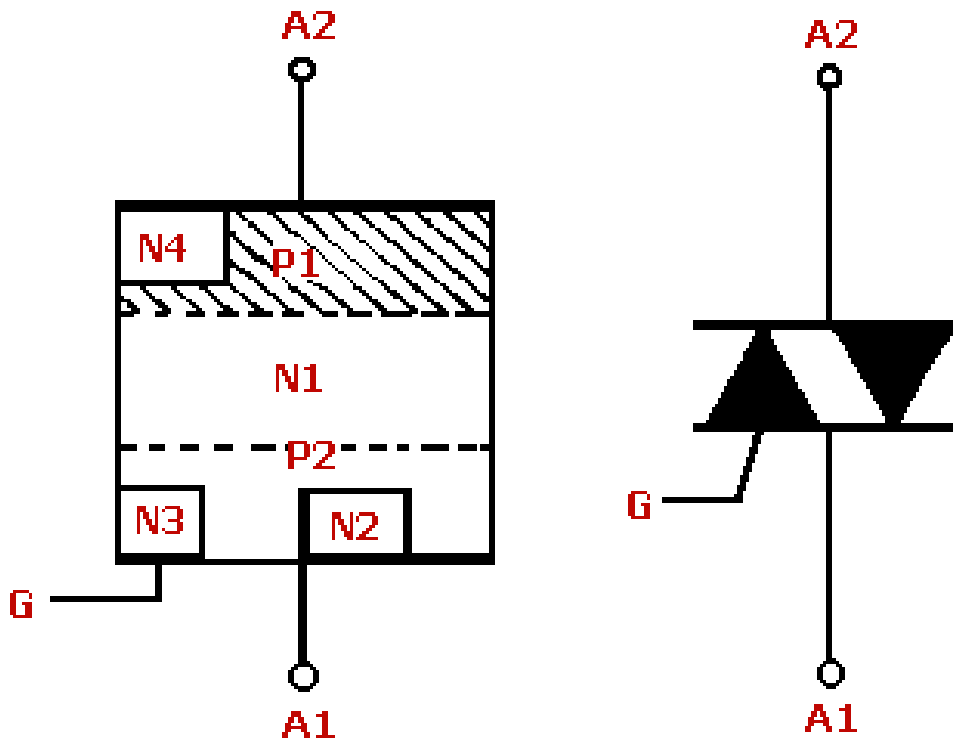
SCR(單向 可控矽)Control Circuit

SCR(單向可控矽)可藉著控制通道角度來控制AC電流功率



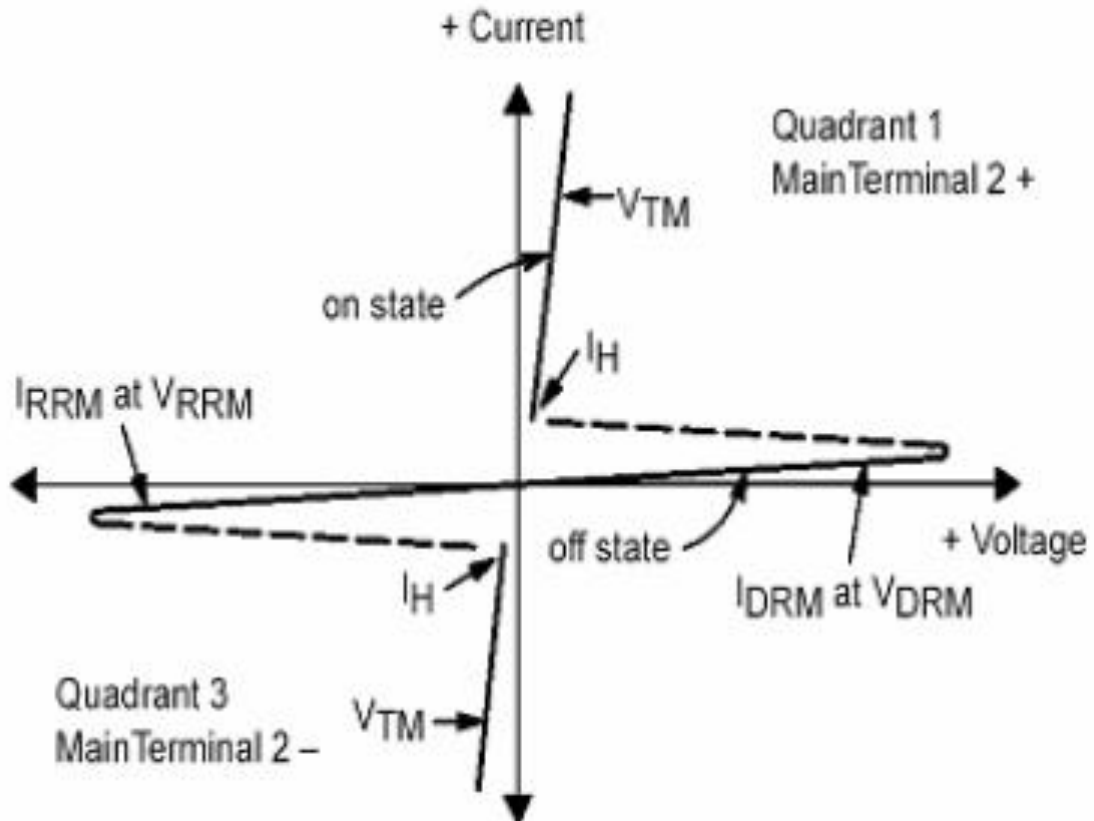
TRIAC(三端雙向 可控硅) Introduction

三端雙向交流開關 (Triode AC Semiconductor Switch)，簡稱TRIAC(三端雙向可控硅)，它可視為兩個反並聯連接的SCR(單向可控硅)，或是雙向SCR(單向可控硅)，故TRIAC為全波元件。

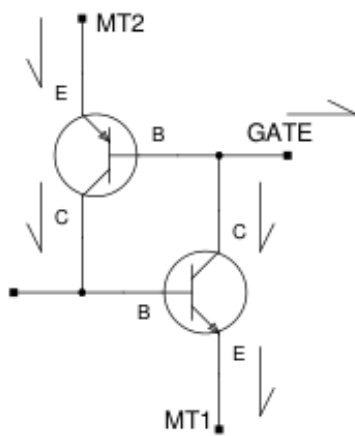


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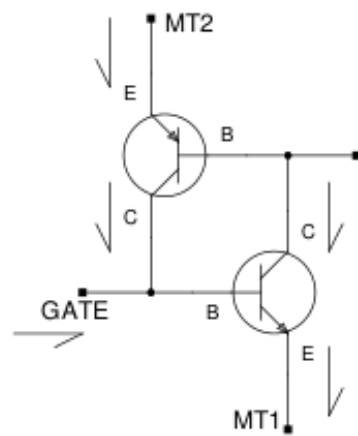
TRIAC(三端雙向 可控硅) V-I Characteristics



TRIAC(三端雙向 可控硅) Triggering Modes

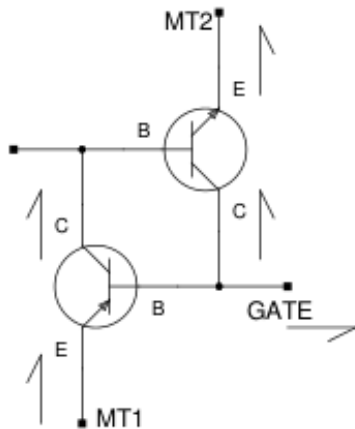


GATE2 negative
MT2 positive

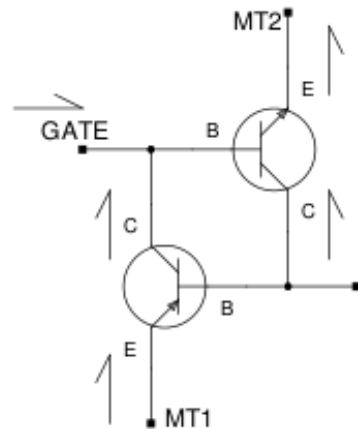


GATE1 positive
MT2 positive

GATE2 negative
MT2 negative

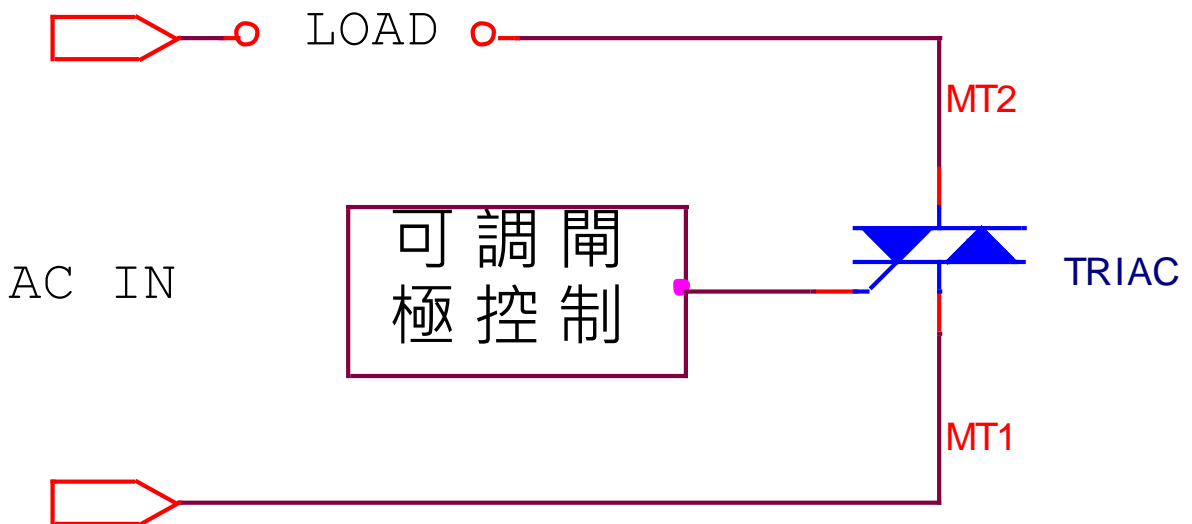


GATE1 positive
MT2 negative



TRIAC(三端雙向 可控硅) Control Circuit

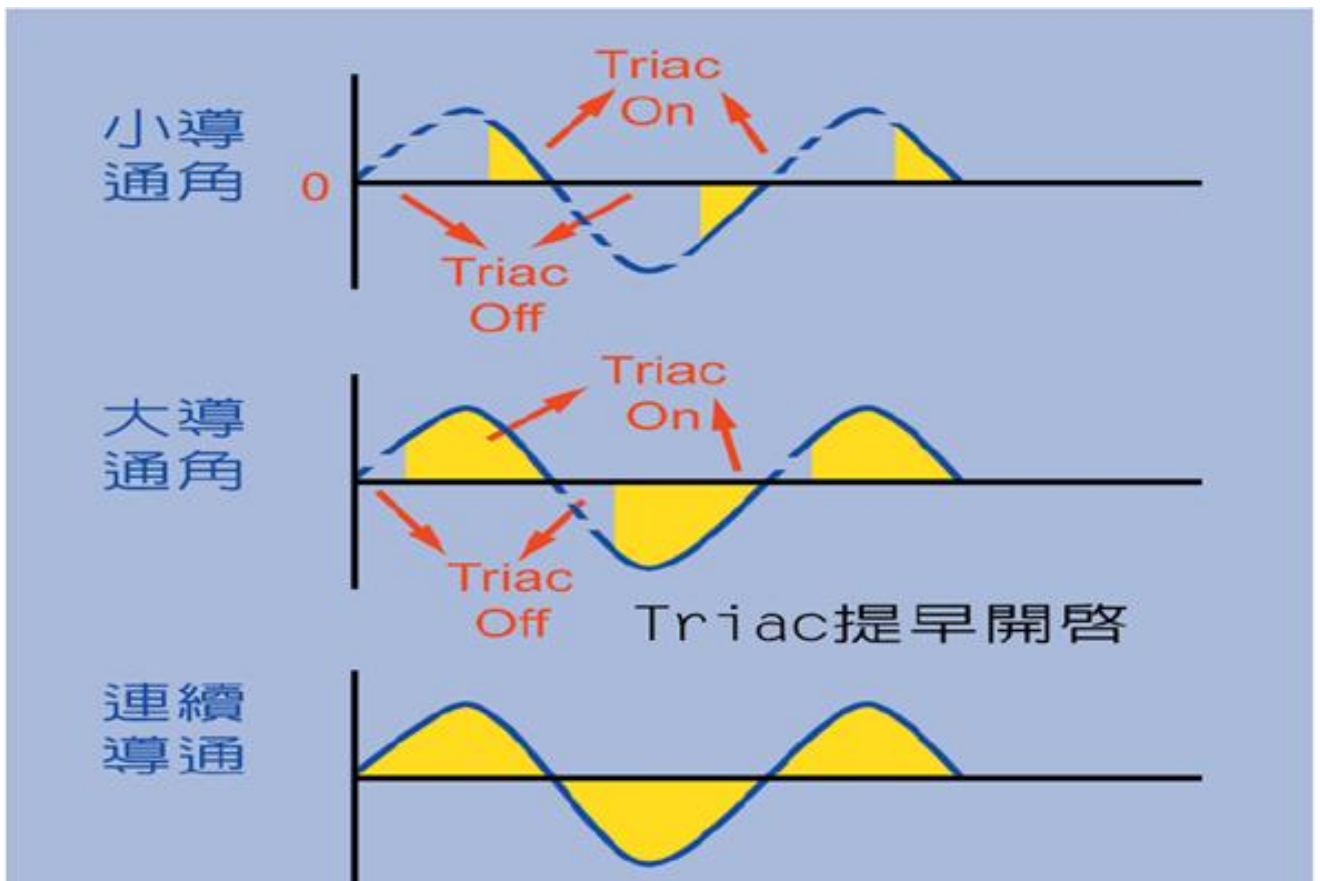
閘極脈衝可讓TRIAC(三端雙向可控硅)在AC電源的正負交替時可被觸發，觸發脈衝的時間可以用來控制負載的導通角度跟功率。



使用TRIAC(三端雙向可控硅)控制電路

TRIAC(三端雙向 可控硅) Control Circuit

TRIAC(三端雙向 可控硅) 控制電路的導通角



SCR(單向 可控矽) Applications



High voltage
ignition
circuits

Motorbike

Gas
appliances

Electric
fences

Safety
shutdown
and
protection
circuits

Electronic
ballasts

Circuit
breakers

GFCIs

ELCBs

RCDs

Static
switch
circuits

Off/On
line UPS

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TRIAC(三端雙向 可控硅) Applications



Induction
motor
controls

Electric
Fans

Vertical
axis
washer

Pumps

Universal
motor
controls

Power
tools

Horizontal
axis
washer

Vacuum
cleaners

Highly
inductive,
resistive and
safety loads

Lamp
dimmers

Contactors

Door locks

Large and
small
appliances

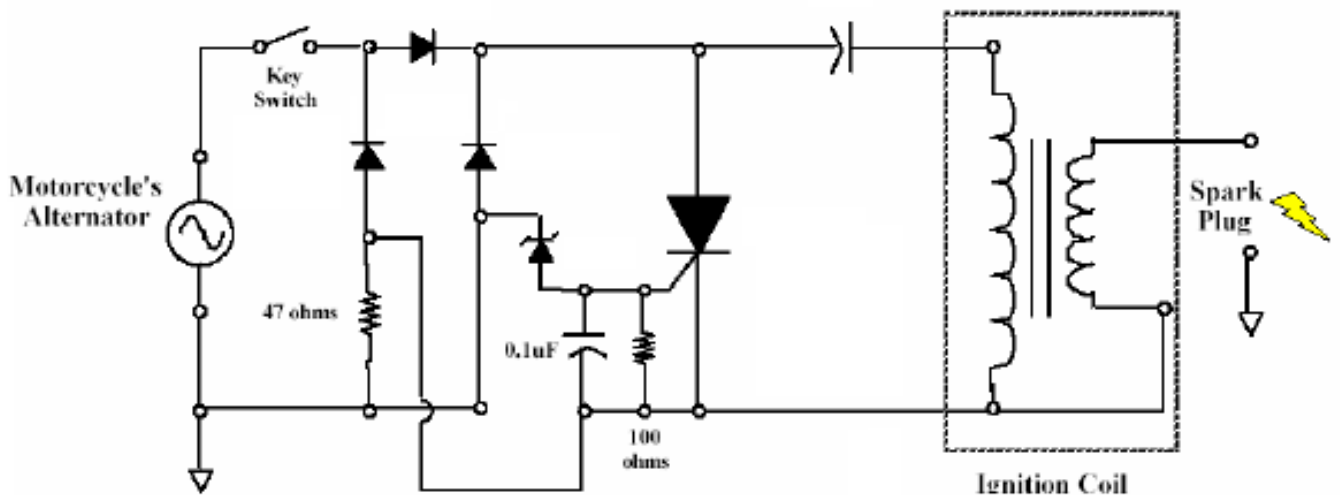
Microwave

Heaters

Printer

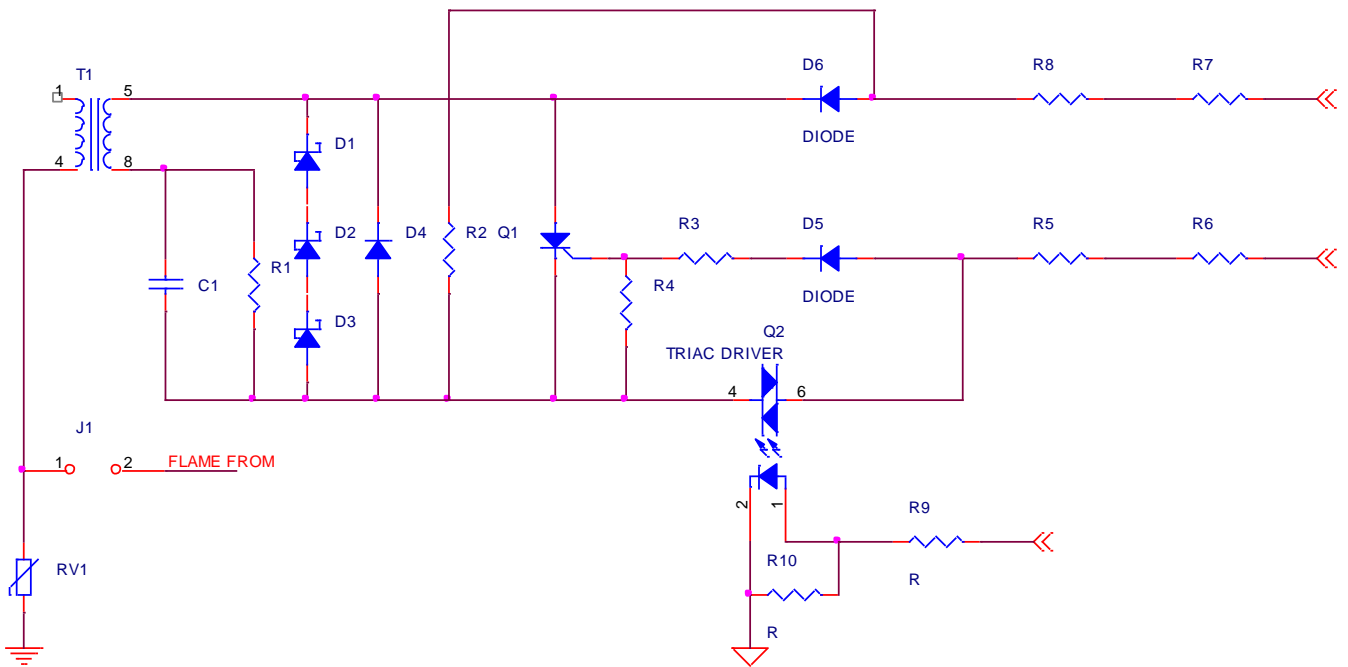
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Motorbike (SCR 單向 可控矽)



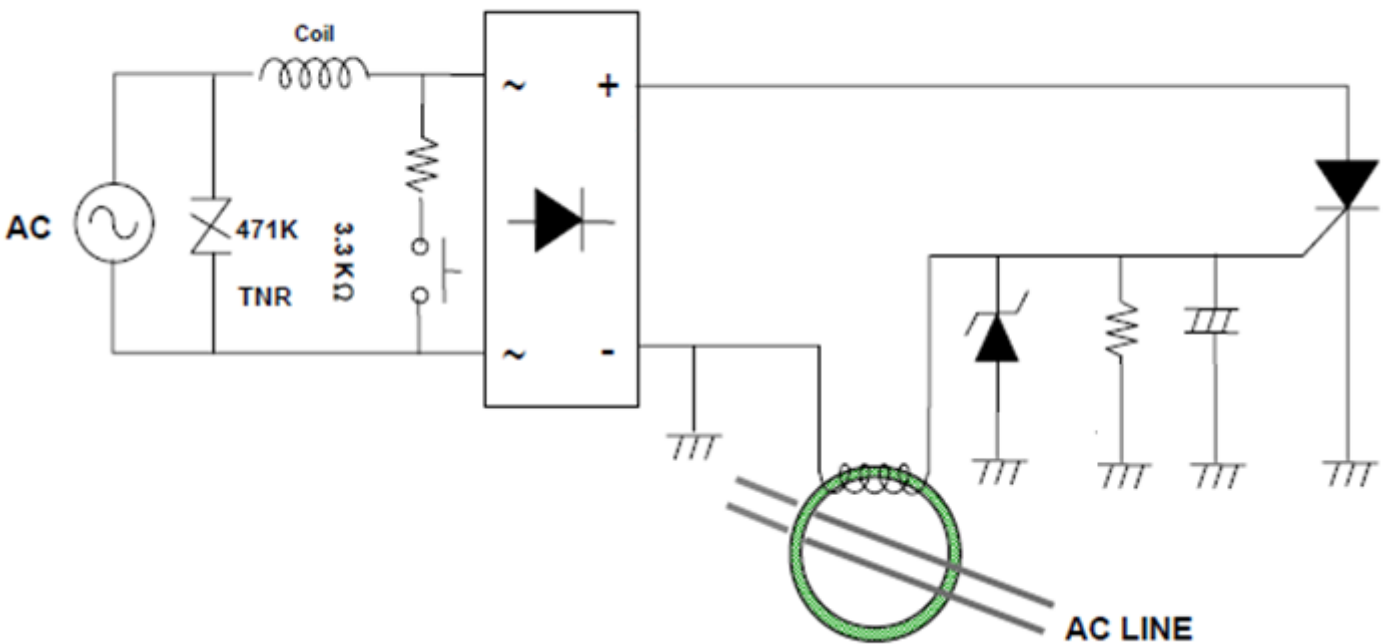
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Ignition driver (SCR 單向 可控矽)



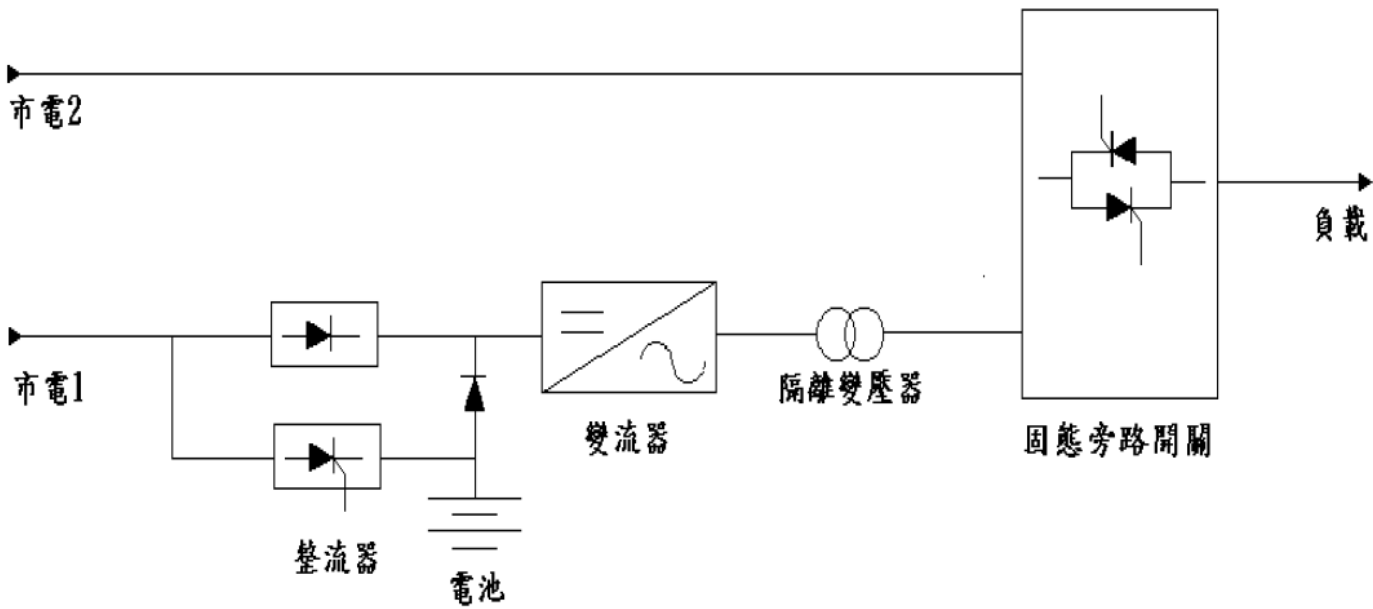
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ELCB (SCR 單向 可控矽)



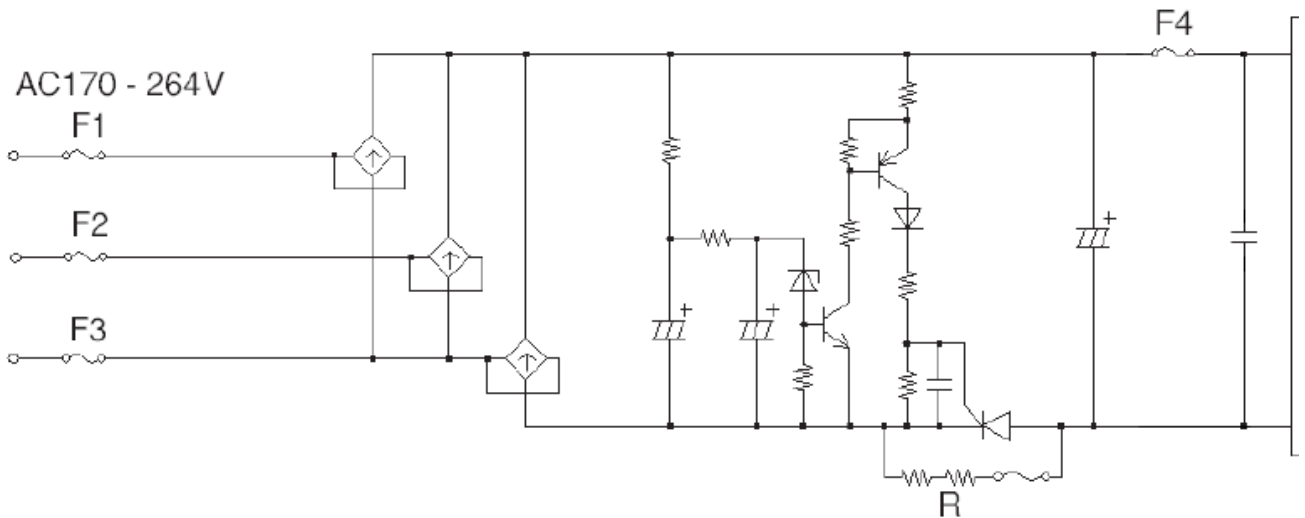
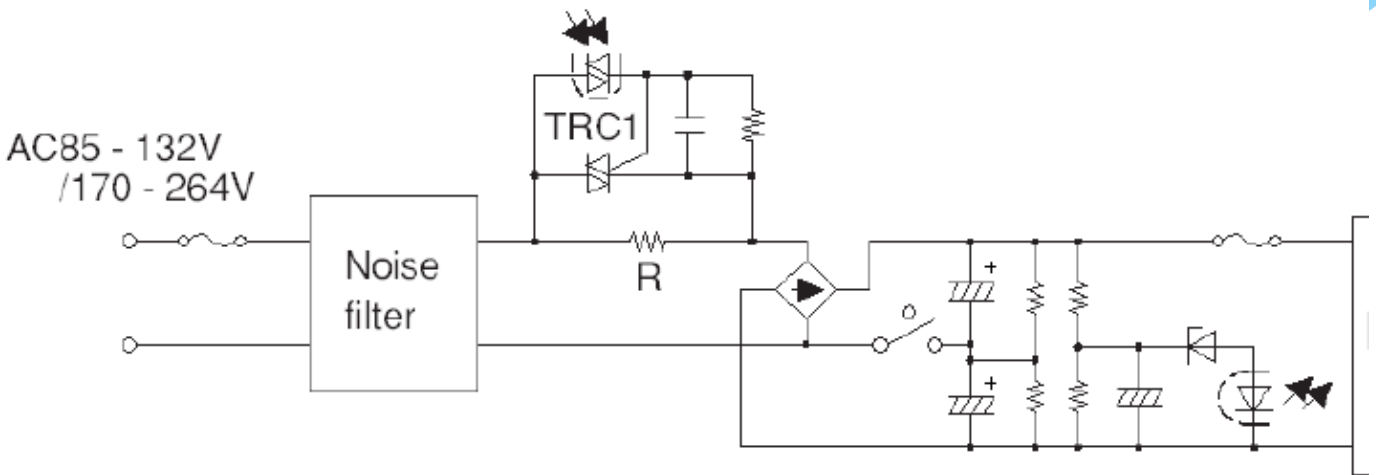
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Off-line UPS (SCR 單向 可控矽)



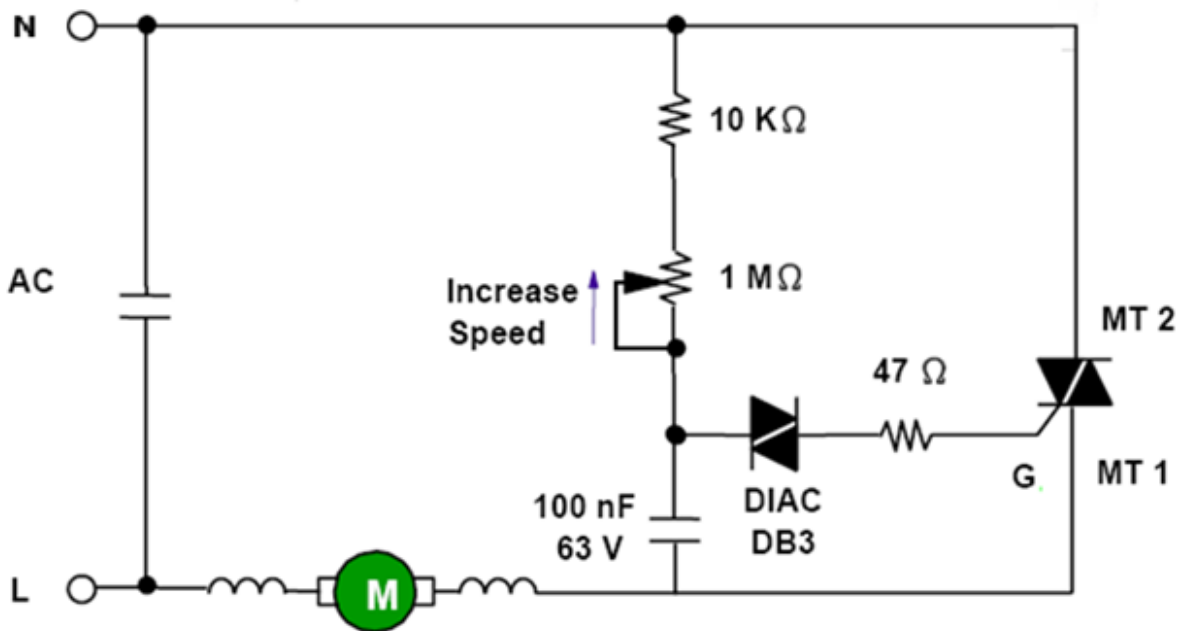
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Inrush current limiting(TRIAC 三端雙向 可控矽)



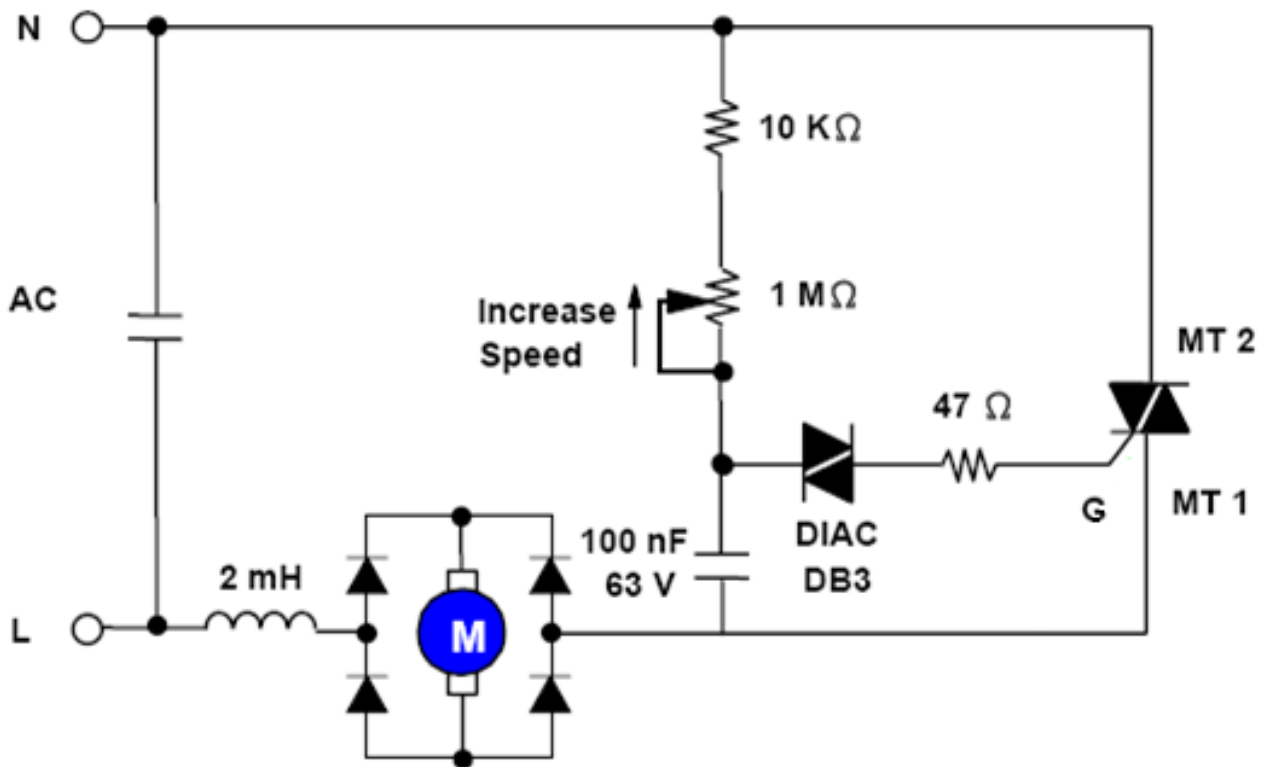
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Vacuum cleaner (TRIAC 三端雙向 可控矽)



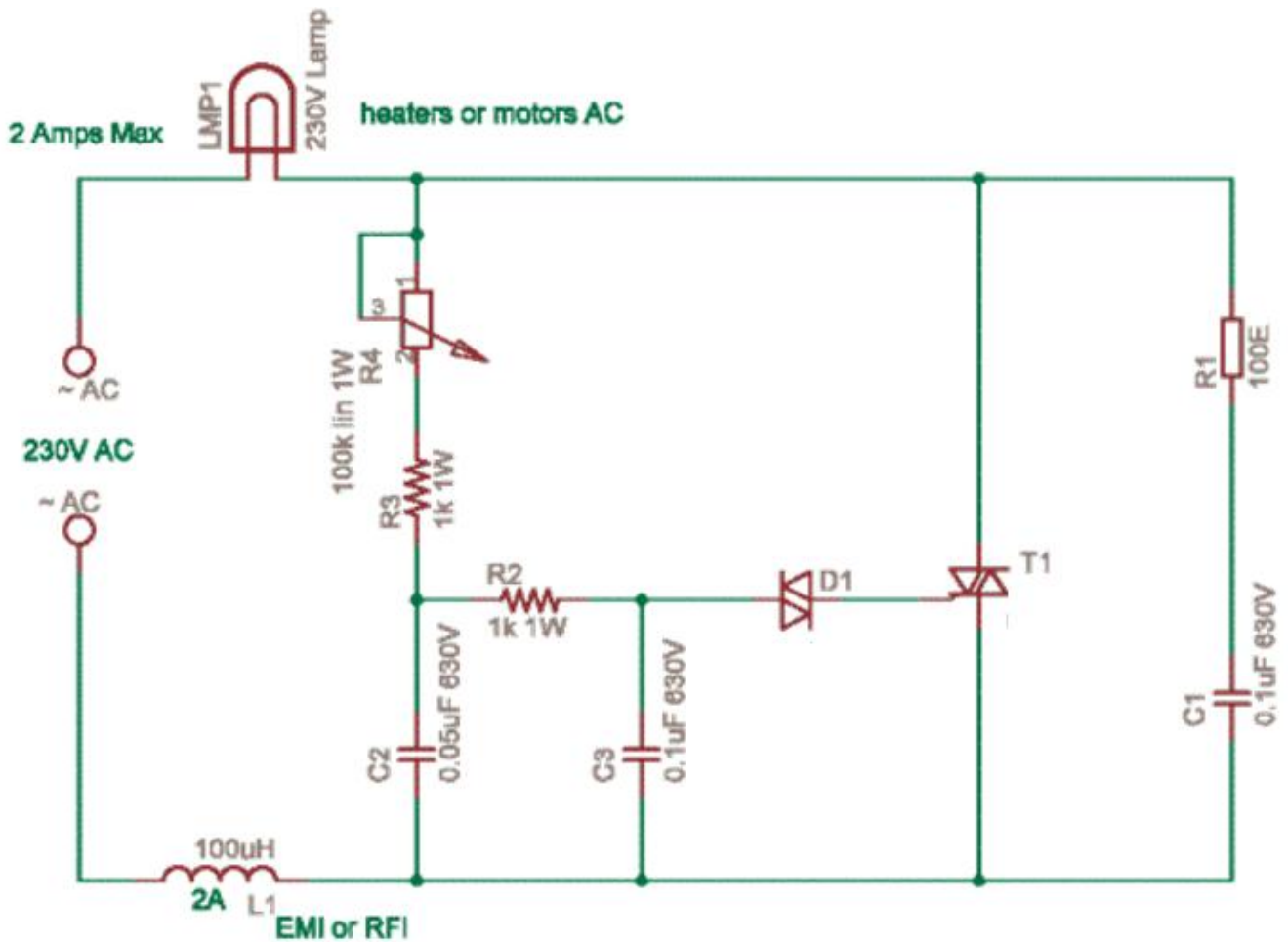
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Power tool (TRIAC 三端雙向 可控矽)

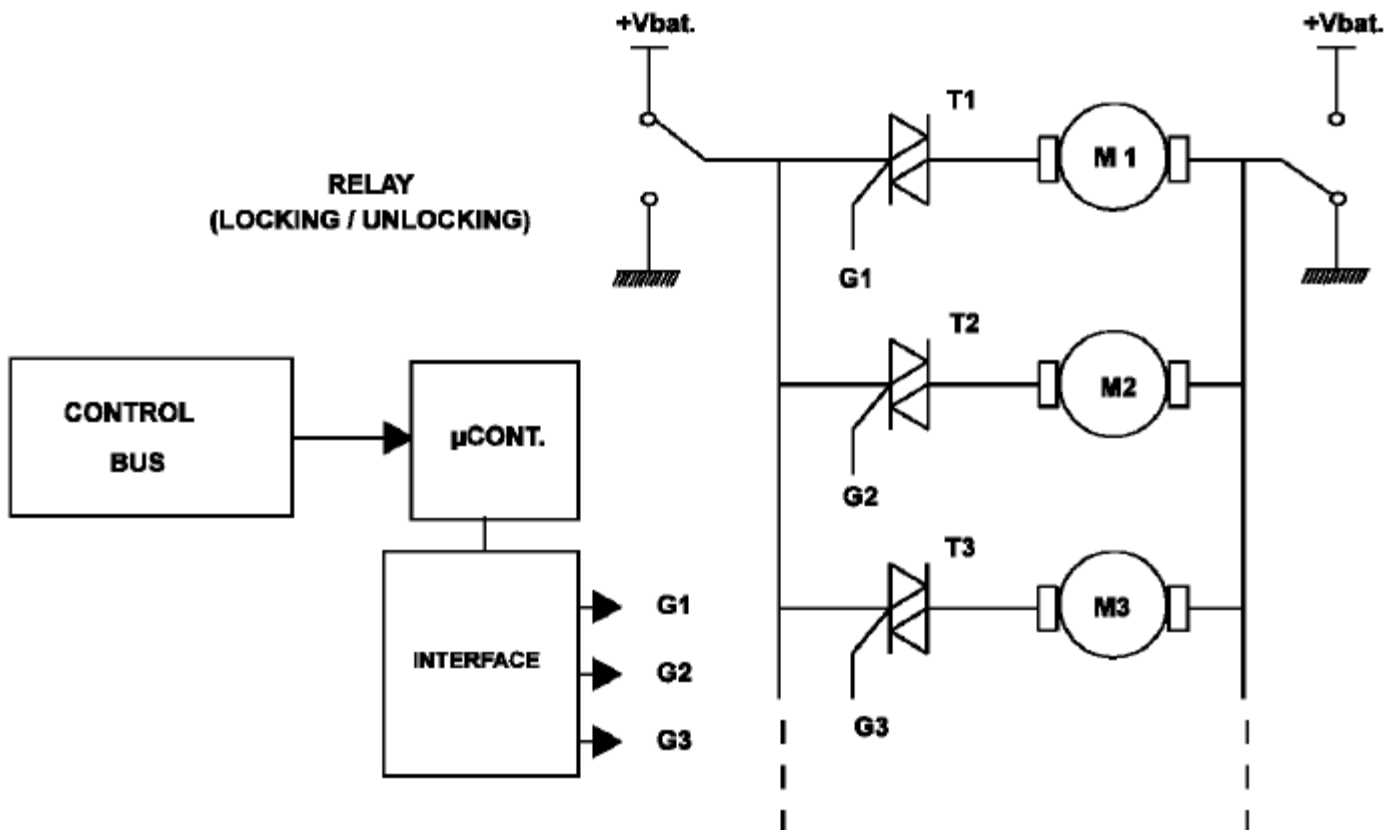


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Lamp dimmers (TRIAC 三端雙向 可控矽)

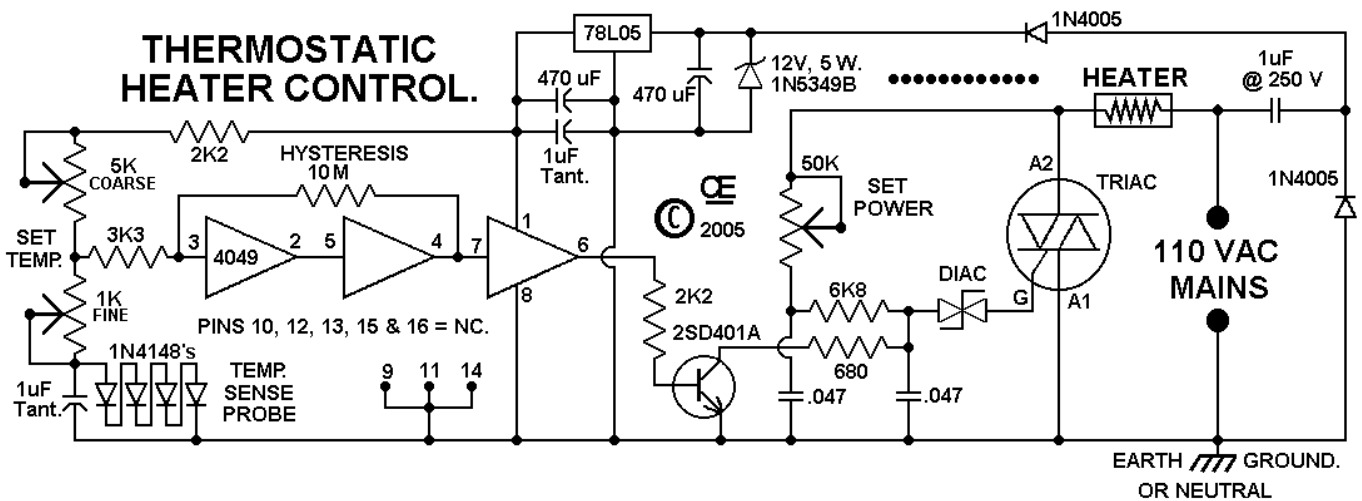


Door lock (TRIAC 三端雙向 可控矽)



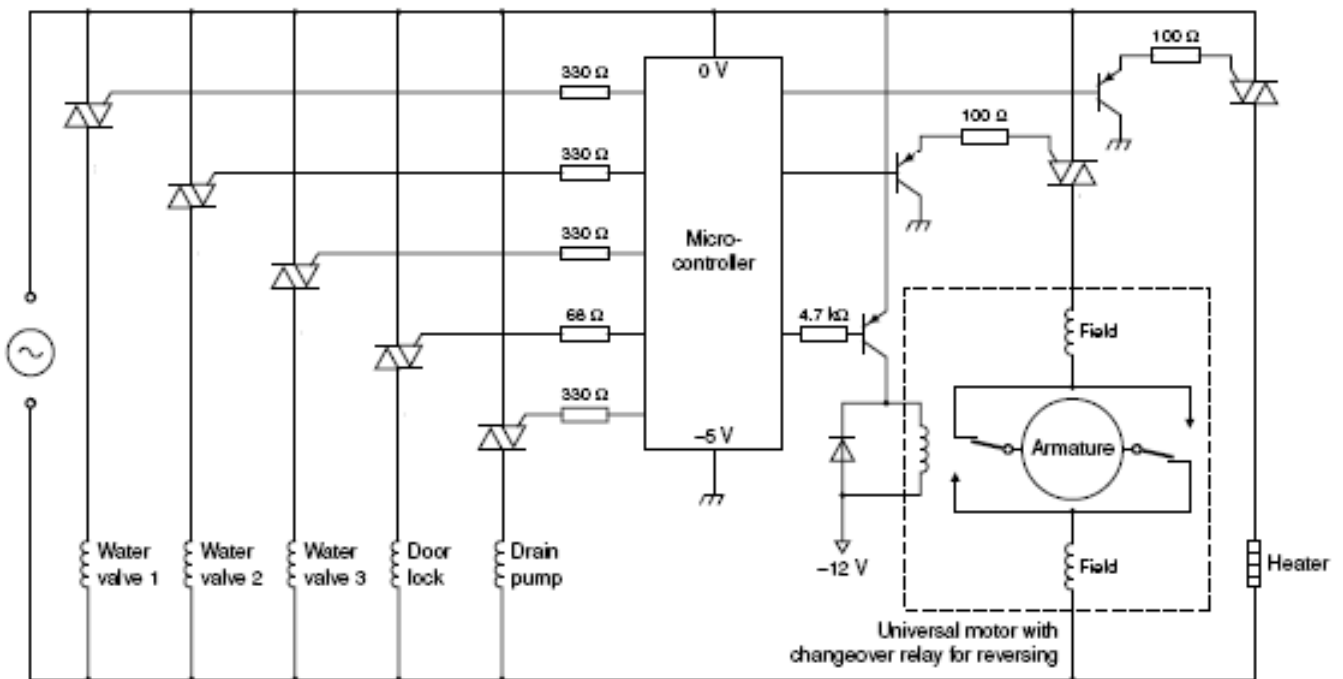
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Heater (TRIAC 三端雙向 可控硅)



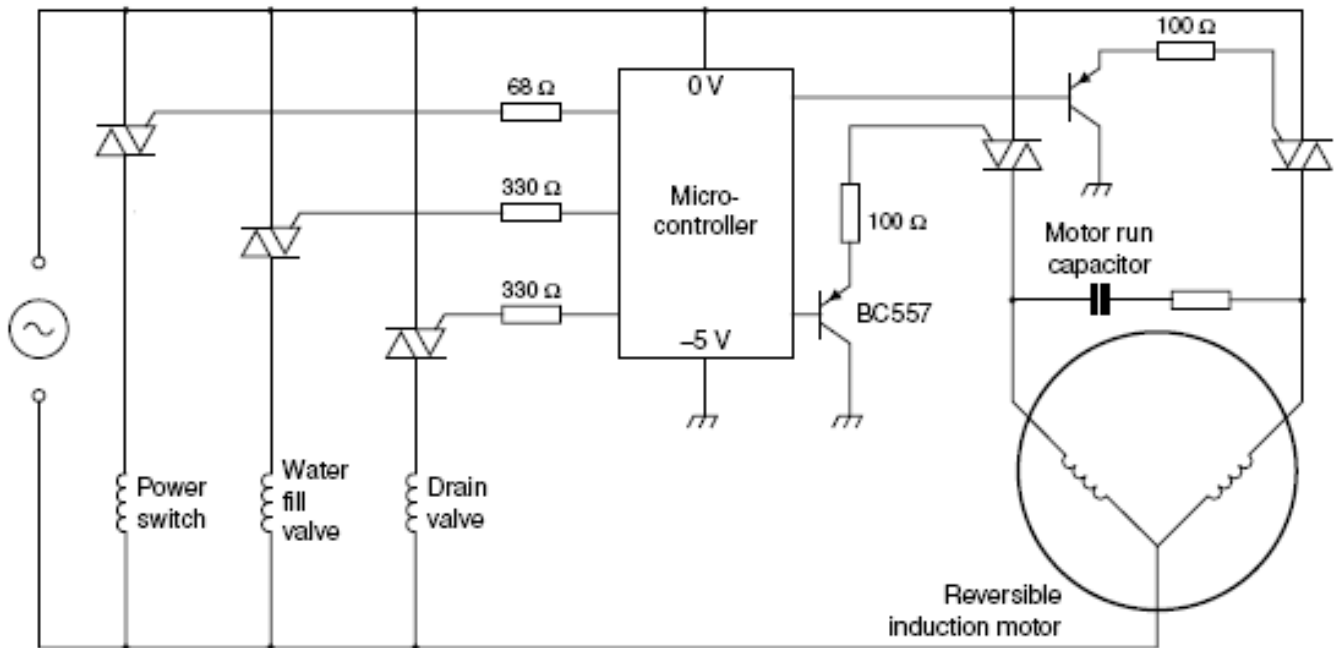
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Horizontal axis washer (TRIAC 三端雙向 可控矽)

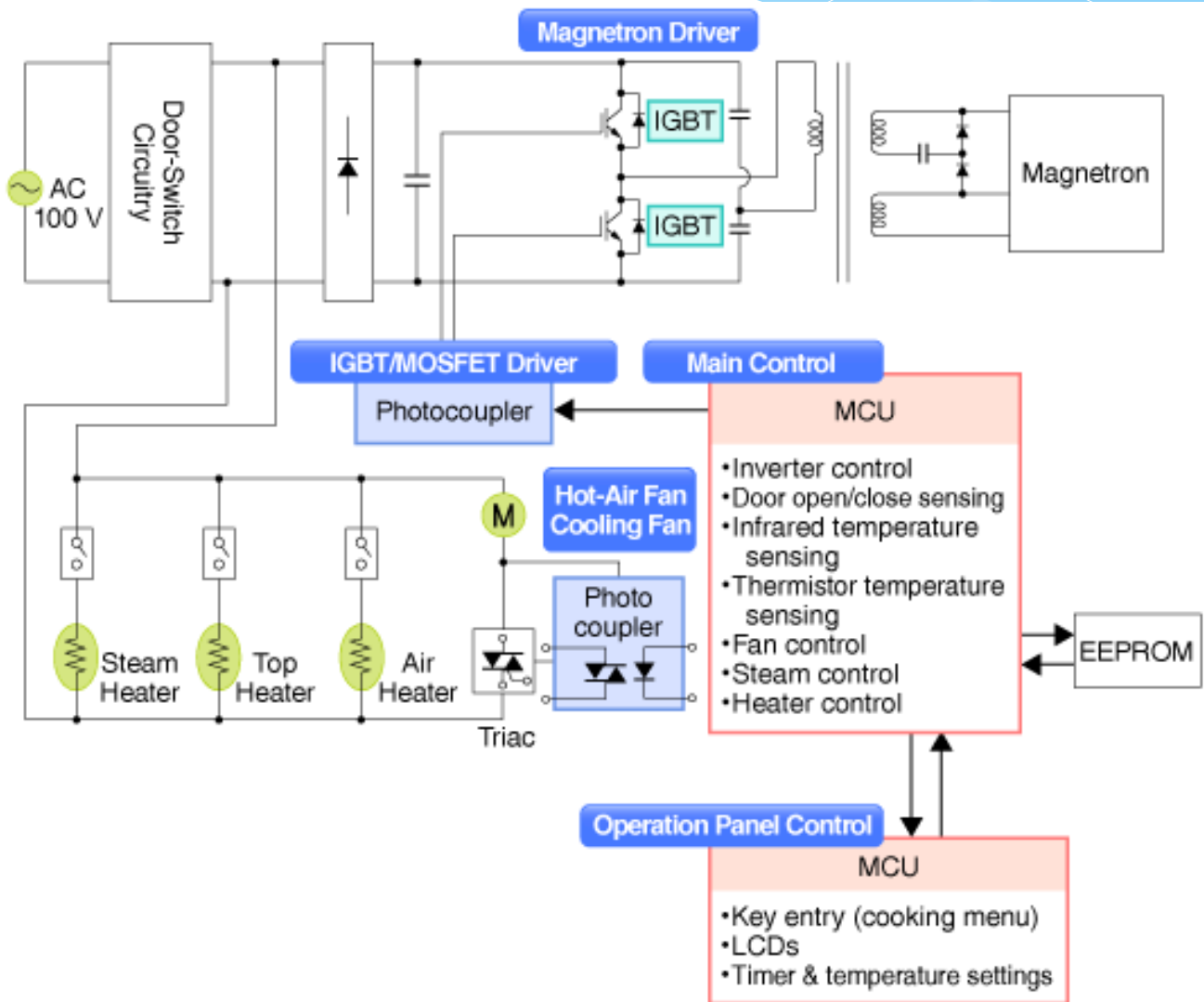


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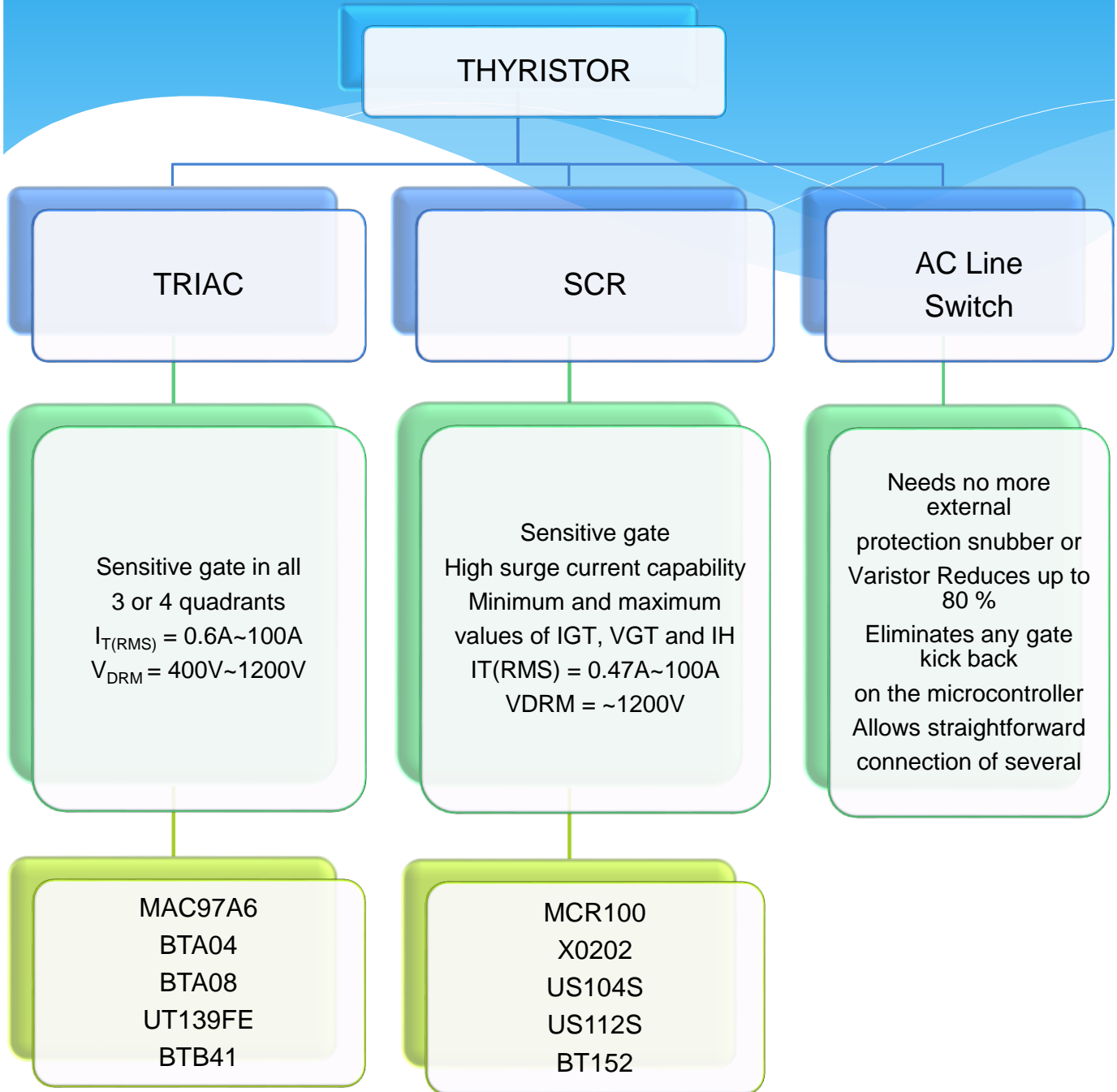
Horizontal axis washer (TRIAC 三端雙向 可控矽)



Microwave (TRIAC 三端雙向 可控矽)



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SCR 單向 可控矽 (1/2)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)							Package
		VDRM	I _{T(RMS)}	IGM	IDRM (uA)	V _{TM} (V)	VGT (V)	I _{GT} (mA)		IH (mA)	I _L (mA)	
		(V)	(A)	(A)	MAX.	MAX.	MAX.	TYP.	MAX.	MAX.	MAX.	
SCR	MCR100-4	200	0.80	1.00	10.00	1.70	0.80	0.04	0.20	5.00	10.00	SOT-89 SOT-23 TO-92
SCR	MCR100-6	400										
SCR	MCR100-8	600										
SCR	MCR101-4	200	0.80	1.00	10.00	1.70	0.80	0.04	0.20	5.00	10.00	TO-92
SCR	MCR101-6	400										
SCR	MCR101-8	600										
SCR	MCR106-6	400	4.00	0.20	10.00	2.00	1.00	-	0.20	5.00	-	TO-126
SCR	MCR106-8	600										
SCR	ML1225	300	0.80	0.10	1.00	1.40	0.80	-	0.20	5.00	6.00	SOT-23 TO-92
SCR	XL1225	400										
SCR	PCR406-5	300	0.80	0.10	1.00	1.40	0.80	-	0.20	5.00	6.00	TO-92
SCR	PCR406-6	400										
SCR	US104S-4	400	4.00	1.20	5.00	1.60	0.80	-	0.20	5.00	6.00	TO-220 TO-251 TO-252
SCR	US104S-6	600										
SCR	US104S-8	800										
SCR	US104N-4	400	4.00	1.20	5.00	1.60	1.30	2.00	15.00	30.00	60.00	TO-220 TO-251 TO-252
SCR	US104N-6	600										
SCR	US104N-8	800										
SCR	US108S-4	400	8.00	4.00	5.00	1.60	0.80	-	0.20	5.00	6.00	TO-220 TO-251 TO-252
SCR	US108S-6	600										
SCR	US108S-8	800										
SCR	US108N-4	400	8.00	4.00	5.00	1.60	1.30	2.00	15.00	30.00	70.00	TO-220 TO-251 TO-252
SCR	US108N-6	600										
SCR	US108N-8	800										
SCR	US112S-4	400	12.00	4.00	5.00	1.60	0.80	-	0.20	5.00	6.00	TO-220 TO-251 TO-252
SCR	US112S-6	600										
SCR	US112S-8	800										
SCR	US112N-4	400	12.00	4.00	5.00	1.60	1.30	2.00	15.00	30.00	60.00	TO-220 TO-251 TO-252
SCR	US112N-6	600										
SCR	US112N-8	800										



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SCR 單向 可控矽 (2/2)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)							Package
		VDRM	I _{T(RMS)}	IGM	IDRM (uA)	V _{TM} (V)	V _{GT} (V)	I _{GT} (mA)		I _H (mA)	I _L (mA)	
		(V)	(A)	(A)	MAX.	MAX.	MAX.	TYP.	MAX.	MAX.	MAX.	
SCR	CR03AM-12	600	0.47	0.30	100.00	1.80	0.80	-	0.10	3.00	-	SOT-89 SOT-23 TO-92
SCR	X0202	600	1.25	1.2	5	1.45	0.8	-	0.2	5	6	SOT-223 TO-92
SCR	X0202A	800										
SCR	BT148-400	400	4	2	500	1.8	1.5	0.015	0.2	6	10	TO-220 TO-251 TO-252
SCR	BT148-500	500										
SCR	BT148-600	600										
SCR	BT149-200	200	0.8	1	100	1.7	0.8	0.05	0.2	5	6	TO-92
SCR	BT149-400	400										
SCR	BT149-600	600										
SCR	BT150-500	500	4.00	2.00	500.00	1.80	1.50	0.015	0.20	6.00	10.00	TO-220 TO-251 TO-252
SCR	BT150-650	650										
SCR	BT150-800	800										
SCR	BT151-500	500	12.00	2.00	500.00	1.75	1.50	2.00	15.00	20.00	40.00	TO-220 TO-251 TO-252
SCR	BT151-650	650										
SCR	BT151-800	800										
SCR	BT152-400	400	20.00	5.00	1000.00	1.75	1.50	3.00	32.00	60.00	80.00	TO-220 TO-220F
SCR	BT152-600	600										
SCR	BT152-800	800										
SCR	BT168-500	500	0.8	1	100	1.7	0.8	0.05	0.2	5	6	TO-92 SOT-223
SCR	BT168-600	600										
SCR	BT169B	200	0.80	1.00	100.00	1.70	0.80	0.05	0.20	5.00	6.00	TO-92 SOT-223
SCR	BT169D	400										
SCR	BT169E	500										
SCR	BT169G	600										
SCR	BT169H	800										
SCR	BT258-500	500										
SCR	BT258-600	600	8.00	2.00	500.00	1.60	1.50	0.05	0.20	6.00	10.00	TO-220 TO-220F TO-251 TO-252
SCR	BT258-800	800										



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TRIAC 三端雙向可控矽 (1/6)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)							Package
		V _{DRM} (V)	I _{T(RMS)} (A)	I _{GM} (A)	On-state							
					V _T (V) MAX.	V _{GT} (V) MAX.	I _{GT} (T2,G) MAX. mA (+, +)	(+, -)	(-, -)	(-, +)	I _H (mA) MAX.	
TRIAC	MAC97A6	400	0.6	1.0	1.9	2.0	5.0	5.0	5.0	7.0	10.0	TO-92 SOT-223
TRIAC	MAC97A8	600										
TRIAC	Z00607	600	0.8	1.0	1.5	1.3	5.0	5.0	5.0	7.0	5.0	TO-92 SOT-223
TRIAC	SM2LZ47	800	2.0	1.6	2.0	1.5	10.0	10.0	10.0	-	10.0	TO-220 TO-220F
TRIAC	SM3GZ47	400	3.0	2.0	1.5	1.5	20.0	20.0	20.0	-	30.0	TO-220 TO-220F
TRIAC	SM3JZ47	600	3.0	2.0	1.5	1.5	20.0	20.0	20.0	-	30.0	TO-220 TO-220F
TRIAC	BTA04-4 (T/D/S/A)	400	4.0	4.0	1.65	1.5	5.0(T)	5.0(T)	5.0(T)	5.0(T)	15.0(T)	TO-220 (Isolated) TO-220F
TRIAC	BTA04-6 (T/D/S/A)	600					5.0(D)	5.0(D)	5.0(D)	10.0(D)	15.0(D)	
TRIAC	BTA04-7 (T/D/S/A)	700					10.0(S)	10.0(S)	10.0(S)	10.0(S)	25.0(S)	
TRIAC	BTA06-6 (C/B)	600	6.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220 (Isolated) TO-220F
TRIAC	BTA06-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTA06-6 (TW/SW/CW/BW)	600	6.0	4.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	TO-220 (Isolated) TO-220F
TRIAC	BTA06-8 (TW/SW/CW/BW)	800					10.0(SW)	10.0(SW)	10.0(SW)		35.0(CW)	
TRIAC	BTA08-6 (C/B)	600	8.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220 (Isolated) TO-220F
TRIAC	BTA08-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTA08-6 (TW/SW/CW/BW)	600	8.0	4.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	TO-220 (Isolated) TO-220F
TRIAC	BTA08-8 (TW/SW/CW/BW)	800					10.0(SW)	10.0(SW)	10.0(SW)		35.0(CW)	
TRIAC	BTA10-6 (C/B)	600	10.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220 (Isolated) TO-220F
TRIAC	BTA10-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTA10-6 (CW/BW)	600	10.0	4.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	35.0(CW)	TO-220 (Isolated) TO-220F
TRIAC	BTA10-8 (CW/BW)	800					50.0(BW)	50.0(BW)	50.0(BW)		50.0(BW)	



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TRIAC 三端雙向 可控矽 (2/6)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)							Package
		V _{DRM} (V)	I _{T(RMS)} (A)	I _{GM} (A)	On-state				I _H (mA) MAX.			
					V _T (V) MAX.	V _{GT} (V) MAX.	I _{GT} (T2,G) MAX. mA					
						(+, +)	(+, -)	(-, -)	(-, +)			
TRIAC	BTA12-6 (C/B)	600	12.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220 (Isolated) TO-220F
TRIAC	BTA12-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTA12-6 (TW/SW/CW/BW)	600	12.0	4.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	TO-220 (Isolated) TO-220F
TRIAC	BTA12-8 (TW/SW/CW/BW)	800					10.0(SW)	10.0(SW)	10.0(SW)		35.0(CW)	
TRIAC	BTA16-6 (C/B)	600	16.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220 (Isolated) TO-220F
TRIAC	BTA16-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTA16-6 (SW/CW/BW)	600	16.0	4.0	1.55	1.3	10.0(SW)	10.0(SW)	10.0(SW)	-	15.0(SW)	TO-220 (Isolated) TO-220F
TRIAC	BTA16-8 (SW/CW/BW)	800					35.0(CW)	35.0(CW)	35.0(CW)		50.0(BW)	
TRIAC	BTA20-6 (CW/BW)	600	20.0	4.0	1.70	1.5	35.0(CW)	35.0(CW)	35.0(CW)	-	50.0(CW)	TO-220 (Isolated) TO-220F
TRIAC	BTA20-7 (CW/BW)	700					50.0(BW)	50.0(BW)	50.0(BW)		50.0(BW)	
TRIAC	BTA25-6 (B)	600	25.0	4.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	TO-220 (Isolated) TO-3P (Isolated) TO-220F TO-3PML
TRIAC	BTA25-8 (B)	800										
TRIAC	BTA25-6 (CW/BW)	600	25.0	4.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	75.0	TO-220 (Isolated) TO-3P (Isolated) TO-220F TO-3PML
TRIAC	BTA25-8 (CW/BW)	800					50.0(BW)	50.0(BW)	50.0(BW)			
TRIAC	BTA41-6	600	41.0	8.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	TO-3P (Isolated) TO-3PML
TRIAC	BTA41-8	800										
TRIAC	BTB04-4 (T/D/S/A)	400	4.0	4.0	1.65	1.5	5.0 (T)	5.0 (T)	5.0 (T)	5.0 (T)	15.0(T)	TO-220 TO-252
TRIAC	BTB04-6 (T/D/S/A)	600					5.0(D)	5.0(D)	5.0(D)	10.0(D)	15.0(D)	
TRIAC	BTB04-7 (T/D/S/A)	700					10.0(S)	10.0(S)	10.0(S)	10.0(S)	25.0(S)	



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TRIAC 三端雙向可控矽 (3/6)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)							Package
		V _{DRM} (V)	I _{T(RMS)} (A)	I _{GM} (A)	On-state							
					V _T (V) MAX.	V _{GT} (V) MAX.	I _{GT} (T2,G) MAX. mA				I _H (mA) MAX.	
(+ , +)	(+ , -)	(- , -)	(- , +)									
TRIAC	BTB06-6 (C/B)	600	6.0	4.0	1.55	1.3	25.0 (C)	25.0 (C)	25.0 (C)	50.0 (C)	25.0(C)	TO-220
TRIAC	BTB06-8 (C/B)	800					50.0 (B)	50.0 (B)	50.0 (B)	100.0 (B)	50.0(B)	
TRIAC	BTB06-6 (TW/SW/CW/BW)	600	6.0	4.0	1.55	1.3	5.0 (TW)	5.0 (TW)	5.0 (TW)	-	10.0 (TW)	TO-220
TRIAC	BTB06-8 (TW/SW/CW/BW)	800					10.0 (SW)	10.0 (SW)	10.0 (SW)		35.0 (CW)	
TRIAC	BTB08-6 (C/B)	600	8.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220
TRIAC	BTB08-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTB08-6 (TW/SW/CW/BW)	600	8.0	4.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	TO-220
TRIAC	BTB08-8 (TW/SW/CW/BW)	800					10.0(SW)	10.0(SW)	10.0(SW)		35.0(CW)	
TRIAC	BTA10-6 (C/B)	600	10.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220
TRIAC	BTB10-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTB10-6 (CW/BW)	600	10.0	4.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	35.0(CW)	TO-220
TRIAC	BTB10-8 (CW/BW)	800					50.0(BW)	50.0(BW)	50.0(BW)		50.0(BW)	
TRIAC	BTB12-6 (C/B)	600	12.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220
TRIAC	BTB12-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTB12-6 (TW/SW/CW/BW)	600	12.0	4.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	TO-220
TRIAC	BTB12-8 (TW/SW/CW/BW)	800					10.0(SW)	10.0(SW)	10.0(SW)		35.0(CW)	
TRIAC	BTB16-6 (C/B)	600	16.0	4.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	TO-220
TRIAC	BTB16-8 (C/B)	800					50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)	
TRIAC	BTB16-6 (SW/CW/BW)	600	16.0	4.0	1.55	1.3	10.0(SW)	10.0(SW)	10.0(SW)	-	15.0(SW)	TO-220
TRIAC	BTB16-8 (SW/CW/BW)	800					35.0(CW)	35.0(CW)	35.0(CW)		50.0(BW)	



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TRIAC 三端雙向可控矽 (4/6)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)							Package
		V _{DRM} (V)	I _{T(RMS)} (A)	I _{GM} (A)	On-state							
					V _T (V) MAX.	V _{GT} (V) MAX.	I _{GT} (T2,G) MAX. mA				I _H (mA) MAX.	
(+, +)	(+, -)	(-, -)	(-, +)									
TRIAC	BTB20-6 (CW/BW)	600	20.0	4.0	1.70	1.5	35.0(CW)	35.0(CW)	35.0(CW)	-	50.0(CW)	TO-220 TO-252
TRIAC	BTB20-7 (CW/BW)	700					50.0(BW)	50.0(BW)	50.0(BW)		75.0(BW)	
TRIAC	BTB25-6 (B)	600	25.0	4.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	TO-220 TO-252 TO-3P
TRIAC	BTB25-8 (B)	800										
TRIAC	BTB25-6 (CW/BW)	600	25.0	4.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	75.0	TO-220 TO-252 TO-3P
TRIAC	BTBA25-8 (CW/BW)	800										
TRIAC	BTB41-6	600	41.0	8.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	TO-3P
TRIAC	BTB41-8	800										
TRIAC	U12JZ47-4	400	12.0	2.0	1.5	1.5	30.0	30.0	30.0	-	50.0	TO-220 (Isolated) TO-220F
TRIAC	U12JZ47A-4						20.0	20.0	20.0			
TRIAC	U12JZ47-6	600	12.0	2.0	1.5	1.5	30.0	30.0	30.0	-	50.0	TO-220 (Isolated) TO-220F
TRIAC	U12JZ47A-6						20.0	20.0	20.0			
TRIAC	UCR16CM-4	400	16.0	2.0	1.5	1.5	30.0	30.0	30.0	-	50.0	TO-220 (Isolated) TO-220F
TRIAC	UCR16CMA-4						20.0	20.0	20.0			
TRIAC	UCR16CM-6	600	16.0	2.0	1.5	1.5	30.0	30.0	30.0	-	50.0	TO-220 (Isolated) TO-220F
TRIAC	UCR16CMA-6						20.0	20.0	20.0			
TRIAC	UCR08AL-7	700	0.8	0.5	2.0	2.0	5.0	5.0	5.0	-	-	TO-92 SOT-89
TRIAC	UT131-5	500	1.0	2.0	1.5	1.5	3.0	3.0	5.0	7.0	5.0	TO-92 SOT-223
TRIAC	UT131-6	600										
TRIAC	UT131-8	800										
TRIAC	UT132-5	500	1.0	2.0	1.7	1.5	5.0	5.0	5.0	10.0	10.0	TO-92
TRIAC	UT132-6	600										
TRIAC	UT134E-5	500	4.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-126
TRIAC	UT134F-5						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT134G-5						50.0	50.0	50.0	100.0	30.0	
TRIAC	UT134E-6	600	4.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-126
TRIAC	UT134F-6						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT134G-6						50.0	50.0	50.0	100.0	30.0	
TRIAC	UT134E-8	800	4.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-126
TRIAC	UT134F-8						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT134G-8						50.0	50.0	50.0	100.0	30.0	



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TRIAC 三端雙向可控矽 (5/6)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)						Package		
		V _{DRM} (V)	I _{T(RMS)} (A)	I _{GM} (A)	On-state		I _{GT} (T2,G) MAX. mA						
					V _T (V) MAX.	V _{GT} (V) MAX.	(+, +)	(+, -)	(-, -)	(-, +)		I _H (mA) MAX.	
TRIAC	UT234D-6	600	4.0	2.0	1.5	1.5	5.0	5.0	5.0	10.0	6.0	TO-220 TO-252	
TRIAC	UT234D-8	800					10.0	10.0	10.0	25.0	15.0		
TRIAC	UT234E-6	600					5.0	5.0	5.0	10.0	6.0		
TRIAC	UT234E-8	800	4.0	2.0	1.5	1.5	10.0	10.0	10.0	25.0	15.0	TO-220F	
TRIAC	UT234FD-6	600					5.0	5.0	5.0	10.0	6.0		
TRIAC	UT234FD-8	800					10.0	10.0	10.0	25.0	15.0		
TRIAC	UT234FE-6	600	500	6.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-220 TO-252
TRIAC	UT234FE-8	800						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT136E-5	600						50.0	50.0	50.0	100.0	30.0	
TRIAC	UT136F-5	500	6.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-220F	
TRIAC	UT136G-5	600					25.0	25.0	25.0	70.0	15.0		
TRIAC	UT136FE-5	600					50.0	50.0	50.0	100.0	30.0		
TRIAC	UT136FF-5	500	600	6.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-220 TO-252
TRIAC	UT136FG-5	600						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT136E-6	600						50.0	50.0	50.0	100.0	30.0	
TRIAC	UT136F-6	600	600	6.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-220F
TRIAC	UT136G-6	600						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT136E-6	600						50.0	50.0	50.0	100.0	30.0	
TRIAC	UT136FE-6	600	800	6.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-220 TO-252
TRIAC	UT136FF-6	600						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT136FG-6	600						50.0	50.0	50.0	100.0	30.0	
TRIAC	UT136E-8	800	800	6.0	2.0	1.7	1.5	10.0	10.0	10.0	25.0	15.0	TO-220F
TRIAC	UT136F-8	800						25.0	25.0	25.0	70.0	15.0	
TRIAC	UT136G-8	800						50.0	50.0	50.0	100.0	30.0	
TRIAC	UT136FE-8	800	500	8.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	20.0	TO-220 TO-252
TRIAC	UT136FF-8	800						25.0	25.0	25.0	70.0	20.0	
TRIAC	UT136FG-8	800						50.0	50.0	50.0	100.0	40.0	
TRIAC	UT137E-5	500	500	8.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	20.0	TO-220F
TRIAC	UT137F-5	500						25.0	25.0	25.0	70.0	20.0	
TRIAC	UT137G-5	500						50.0	50.0	50.0	100.0	40.0	
TRIAC	UT137FE-5	500	600	8.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	20.0	TO-220 TO-252
TRIAC	UT137FF-5	600						25.0	25.0	25.0	70.0	20.0	
TRIAC	UT137FG-5	600						50.0	50.0	50.0	100.0	40.0	
TRIAC	UT137E-6	600	800	8.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	20.0	TO-220 TO-252
TRIAC	UT137F-6	600						25.0	25.0	25.0	70.0	20.0	
TRIAC	UT137G-6	600						50.0	50.0	50.0	100.0	40.0	
TRIAC	UT137FE-6	600	800	8.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	20.0	TO-220F
TRIAC	UT137FF-6	800						25.0	25.0	25.0	70.0	20.0	
TRIAC	UT137FG-6	800						50.0	50.0	50.0	100.0	40.0	
TRIAC	UT137E-8	800	800	8.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	20.0	TO-220 TO-252
TRIAC	UT137F-8	800						25.0	25.0	25.0	70.0	20.0	
TRIAC	UT137G-8	800						50.0	50.0	50.0	100.0	40.0	
TRIAC	UT137FE-8	800	800	8.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	20.0	TO-220F
TRIAC	UT137FF-8	800						25.0	25.0	25.0	70.0	20.0	
TRIAC	UT137FG-8	800						50.0	50.0	50.0	100.0	40.0	



Support. Service. Solution.

TRIAC 三端雙向可控矽 (6/6)

	Part No.	Maximum Ratings			Electrical Characteristics (TA=25°C)						Package	
		V _{DRM} (V)	I _{T(RMS)} (A)	I _{GM} (A)	V _T (V) MAX.	V _{GT} (V) MAX.	On-state					
							I _{GT} (T2,G) MAX. mA					I _H (mA) MAX.
						(+, +)	(+, -)	(-, -)	(-, +)			
TRIAC	UT138E-5	500	12.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	30.0	TO-220 TO-252
TRIAC	UT138F-5						25.0	25.0	25.0	70.0	30.0	
TRIAC	UT138G-5						50.0	50.0	50.0	100.0	60.0	
TRIAC	UT138FE-5	500	12.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	30.0	TO-220F
TRIAC	UT138FF-5						25.0	25.0	25.0	70.0	30.0	
TRIAC	UT138FG-5						50.0	50.0	50.0	100.0	60.0	
TRIAC	UT138E-6	600	12.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	30.0	TO-220 TO-252
TRIAC	UT138F-6						25.0	25.0	25.0	70.0	30.0	
TRIAC	UT138G-6						50.0	50.0	50.0	100.0	60.0	
TRIAC	UT138FE-6	600	12.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	30.0	TO-220F
TRIAC	UT138FF-6						25.0	25.0	25.0	70.0	30.0	
TRIAC	UT138FG-6						50.0	50.0	50.0	100.0	60.0	
TRIAC	UT138E-8	800	12.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	30.0	TO-220 TO-252
TRIAC	UT138F-8						25.0	25.0	25.0	70.0	30.0	
TRIAC	UT138G-8						50.0	50.0	50.0	100.0	60.0	
TRIAC	UT138FE-8	800	12.0	2.0	1.65	1.5	10.0	10.0	10.0	25.0	30.0	TO-220F
TRIAC	UT138FF-8						25.0	25.0	25.0	70.0	30.0	
TRIAC	UT138FG-8						50.0	50.0	50.0	100.0	60.0	
TRIAC	UT139-6	600	16.0	2.0	1.6	1.5	35.0	35.0	35.0	70.0	45.0	TO-220 TO-252
TRIAC	UT139-8	800					10.0	10.0	10.0	25.0	45.0	
TRIAC	UT139E-6	600					25.0	25.0	25.0	70.0	45.0	
TRIAC	UT139E-8	800					50.0	50.0	50.0	100.0	60.0	
TRIAC	UT139F-6	600					10.0	10.0	10.0	25.0	45.0	
TRIAC	UT139F-8	800					25.0	25.0	25.0	70.0	45.0	
TRIAC	UT139G-6	600					50.0	50.0	50.0	100.0	60.0	
TRIAC	UT139G-8	800										
TRIAC	UT139FE-6	600	16.0	2.0	1.6	1.5	10.0	10.0	10.0	25.0	45.0	TO-220F
TRIAC	UT139FE-8	800					25.0	25.0	25.0	70.0	45.0	
TRIAC	UT139FF-6	600					50.0	50.0	50.0	100.0	60.0	
TRIAC	UT139FF-8	800										
TRIAC	UT139FG-6	600										
TRIAC	UT139FG-8	800										