

# Thyristors and Triggers

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## In Brief . . .

- Motorola's broad line of Thyristors includes. . . .
- A full line of TRIACs and SCRs covering a forward current range from 0.5 to 55 amperes and blocking voltages from 15 to 800 volts.
  - Plastic package for lowest cost which includes the fully insulated plastic Case 221C (TO-220 Isolated).
  - An extensive line of trigger devices that includes SIDACs, PUTs and SBS.

Then there are the special applications devices for Ignition circuits and Crowbar applications. Also included are isolated packaged devices for appliances and surface mount packages for surface mounting in space-saving requirements.

Finally, there is the continued Motorola investment in discrete-product R & D producing new capabilities such as transient SIDACs for use in circuits sensitive to high voltage transients.

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# SCRs

## Silicon Controlled Rectifiers

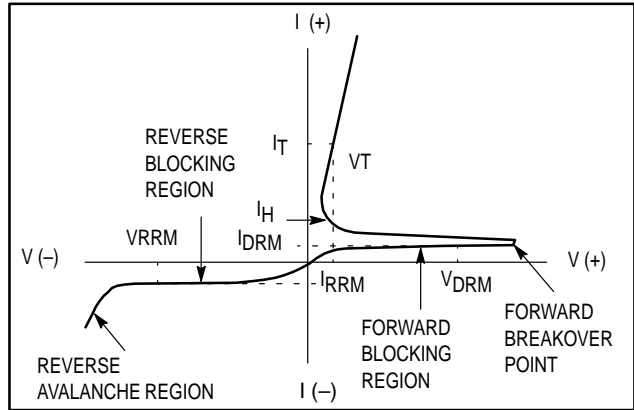
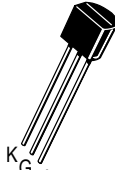
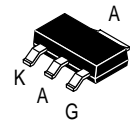
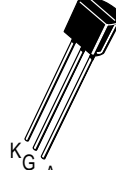


Table 1. SCRs — General Purpose Plastic Packages  
0.8 to 55 Amperes RMS, 25 to 800 Volts

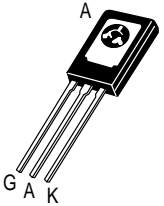
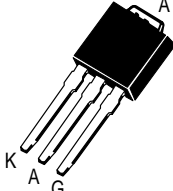
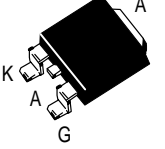
On-State (RMS) Current			V <sub>DRM</sub> V <sub>RRM</sub> (Volts)
0.8 AMP		1.5 AMPS	
T <sub>C</sub> = 58°C	T <sub>C</sub> = 80°C	T <sub>C</sub> = 50°C	
			
Sensitive Gate			
Case 29-04 TO-226AA (TO-92) Style 10	Case 318E SOT-223 STYLE 10	Case 29-04 TO-226AA (TO-92) Style 10	
			25
			50
			100
	<b>MCR08BT1</b>		200
<b>MCR100-6</b>	<b>MCR08DT1</b>	<b>MCR22-6</b>	400
			500
<b>MCR100-8</b>	<b>MCR08MT1</b>	<b>MCR22-8</b>	600
Maximum Electrical Characteristics			
10	10	15 150 <sup>(3)</sup>	I <sub>TSM</sub> (Amps) 60 Hz
	0.2		I <sub>GT</sub> (mA)
	0.8		V <sub>GT</sub> (V)
-65 to +110	-40 to +110	-40 to +125	T <sub>J</sub> Operating Range (°C)


(3) Exponential decay 2 μs wide at 5 time constants, f = 12 Hz.

Devices listed in bold, italic are Motorola preferred devices.

# SCRs (continued)

Table 1. SCRs — General Purpose Plastic Packages (continued)

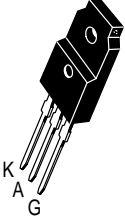
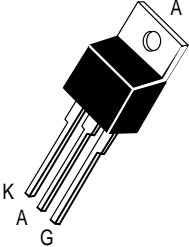
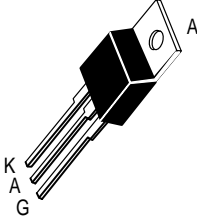
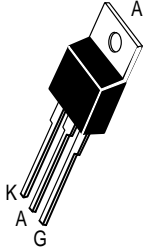

V <sub>DRM</sub> V <sub>RPM</sub> (Volts)	On-State (RMS) Current			
	4 AMPS			
	T <sub>C</sub> = 93°C		T <sub>C</sub> = 30°C	
				
	Sensitive Gate			Surface Mount
	Case 77 TO-225AA (TO-126) Style 2		Case 369 Style 4	Case 369A Style 4
50	<i>MCR106-2</i> <i>2N6237</i>	<i>C106F</i>		
100	MCR106-3 <i>2N6238</i>	<i>C106A</i>		
200	<i>MCR106-4</i> <i>2N6239</i>	<i>C106B</i>		
400	<i>MCR106-6</i> <i>2N6240</i>	<i>C106D</i>	MCR716-1	MCR716
600	<i>MCR106-8</i> <i>2N6241</i>	<i>C106M</i>	MCR718-1	MCR718
800				
Maximum Electrical Characteristics				
I <sub>TSM</sub> (Amps) 60 Hz	25	20	25	
I <sub>GT</sub> (mA)	0.2		0.075	
V <sub>GT</sub> (V)	1	0.8	1	
T <sub>J</sub> Operating Range (°C)	-40 to +110			


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SCRs (continued)

Table 1. SCRs — General Purpose Plastic Packages (continued)

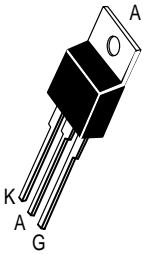
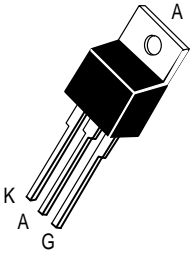
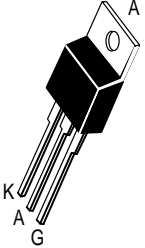
On-State (RMS) Current					V <sub>DRM</sub> V <sub>RRM</sub> (Volts)
8 AMPS				10 AMPS	
T <sub>C</sub> = 70°C	T <sub>C</sub> = 83°C	T <sub>C</sub> = 80°C		T <sub>C</sub> = 75°C	
					
High Performance					
Isolated 	Sensitive Gate			Sensitive Gate	
Case 221C-02 Style 2	Case 221A-04 TO-220AB Style 3	Case 221A-06 TO-220AB Style 3		Case 221A-04 TO-220AB Style 3	
	MCR72-2				50
	MCR72-3			MCR310-3	100
MCR218-4FP	MCR72-4			MCR310-4	200
MCR218-6FP	MCR72-6	<b>MCR8D</b>	<b>MCR8SD</b>	MCR310-6	400
MCR218-8FP	MCR72-8	<b>MCR8M</b>	<b>MCR8SM</b>	MCR310-8	600
MCR218-10FP	MCR72-10	<b>MCR8N</b>	<b>MCR8SN</b>	MCR310-10	800
Maximum Electrical Characteristics					
80	100	80		100	I <sub>TSM</sub> (Amps) 60 Hz
25	0.2	15	0.2		I <sub>GT</sub> (mA)
1.5		1		1.5	V <sub>GT</sub> (V)
		Min.	Min.		
		50	2		
-40 to +125	-40 to +110	-40 to +125	-40 to +110		T <sub>J</sub> Operating Range (°C)

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# SCRs (continued)

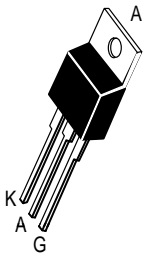
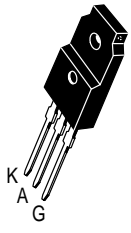
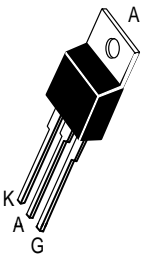
Table 1. SCRs — General Purpose Plastic Packages (continued)

$V_{DRM}$ $V_{RRM}$ (Volts)	On-State (RMS) Current				
	10 AMPS	12 AMPS	16 AMPS	25 AMPS	
	$T_C = 75^\circ\text{C}$	$T_C = 80^\circ\text{C}$			$T_C = 85^\circ\text{C}$
					
	Sensitive Gate	High Performance			
	Case 221A-04 TO-220AB Style 3	Case 221A-06 TO-220AB Style 3			Case 221A-04 TO-220AB Style 3
50					2N6504
100					2N6505
200					2N6506
400	MCR12LD	<i>MCR12D</i>	<i>MCR16D</i>	<i>MCR25D</i>	2N6507
600	MCR12LM	<i>MCR12M</i>	<i>MCR16M</i>	<i>MCR25M</i>	2N6508
800	MCR12LN	<i>MCR12N</i>	<i>MCR16N</i>	<i>MCR25N</i>	2N6509
Maximum Electrical Characteristics					
$I_{TSM}$ (Amps) 60 Hz	100		150	300	
$I_{GT}$ (mA)	8	20		30	40
$V_{GT}$ (V)	1.5	2.2	1.7	1	1.5
$DV/DT$ V/ $\mu\text{sec}$	Min.	Min.	Min.	Min.	
	50	50	50	50	
$T_J$ Operating Range ( $^\circ\text{C}$ )	-40 to +100		-40 to +125		


Devices listed in bold, italic are Motorola preferred devices.

# SCRs (continued)

Table 1. SCRs — General Purpose Plastic Packages (continued)

On-State (RMS) Current				V <sub>DRM</sub> V <sub>RPM</sub> (Volts)
25 AMPS		40 AMPS	55 AMPS	
T <sub>C</sub> = 85°C		T <sub>C</sub> = 80°C	T <sub>C</sub> = 70°C	
				
Case 221A-04 TO-220AB Style 3	Case 221C-02 Style 2	Case 221A-04 TO-220AB Style 3		
MCR69-2	MCR225-2FP			50
MCR69-3				100
	MCR225-4FP	<i>MCR264-4</i>	<i>MCR265-4</i>	200
MCR69-6	MCR225-6FP	<i>MCR264-6</i>	<i>MCR265-6</i>	400
	MCR225-8FP	<i>MCR264-8</i>	<i>MCR265-8</i>	600
	MCR225-10FP	<i>MCR264-10</i>	<i>MCR265-10</i>	800
<b>Maximum Electrical Characteristics</b>				
750(2)	300	400	550	I <sub>TSM</sub> (Amps) 60 Hz
30	40	50		I <sub>GT</sub> (mA)
1.5				V <sub>GT</sub> (V)
-40 to +125				T <sub>J</sub> Operating Range (°C)

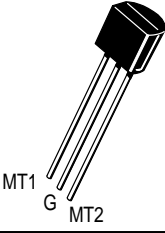
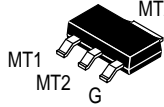
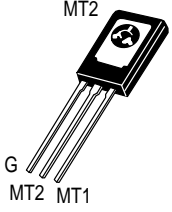
(2) Peak capacitor discharge current for  $t_w = 1$  ms.  $t_w$  is defined as five time constants of an exponentially decaying current pulse (crowbar applications).

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# TRIACs

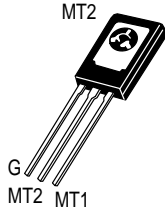
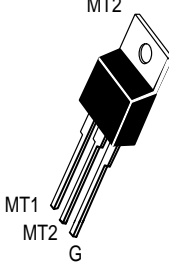
Table 2. TRIACs — General Purpose Plastic Packages  
0.6 to 40 Amperes, 200 to 800 Volts

$V_{DRM}$ (Volts)	On-State (RMS) Current			
	0.6 AMP		0.8 AMPS	2.5 AMPS
	$T_C = 50^\circ\text{C}$		$T_C = 80^\circ\text{C}$	$T_C = 70^\circ\text{C}$
				
	Sensitive Gate			
	Case 29-04 TO-226AA (TO-92) Style 12	Case 318E Style 11 SOT-223	Case 77 TO-225AA (TO-126) Style 5	
200			<i>MAC08BT1</i>	<i>T2322B</i>
400	<i>MAC97-6</i>	<i>MAC97A6</i>	<i>MAC08DT1</i>	<i>T2322D</i>
600	<i>MAC97-8</i>	<i>MAC97A8</i>	<i>MAC08MT1</i>	<i>T2322M</i>
Maximum Electrical Characteristics				
$I_{TSM}$ (Amps)	8		10	25
$I_{GT}$ @ 25°C (mA)				
MT2(+) $G$ (+)	10	5	10	10
MT2(+) $G$ (-)	10	5	10	10
MT2(-) $G$ (-)	10	5	10	10
MT2(-) $G$ (+)	10	7	10	10
$V_{GT}$ @ 25°C (V)			0.8	
MT2(+) $G$ (+)	2		2	2.2
MT2(+) $G$ (-)	2		2	2.2
MT2(-) $G$ (-)	2		2	2.2
MT2(-) $G$ (+)	2.5		2	2.2
$T_J$ Operating Range (°C)	-40 to +110			

Devices listed in bold, italic are Motorola preferred devices.

# TRIACs (continued)

Table 2. TRIACs (continued)

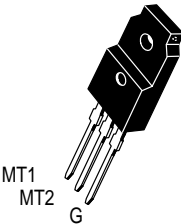
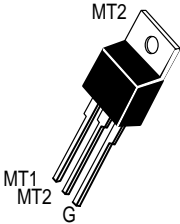
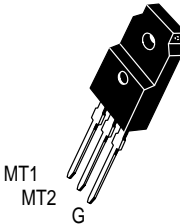


On-State (RMS) Current					
2.5 AMPS		4 AMPS		6 AMPS	
T <sub>C</sub> = 70°C		T <sub>C</sub> = 85°C		T <sub>C</sub> = 80°C	
					
Sensitive Gate					
Case 77 TO-225AA (TO-126) Style 5				Case 221A-04 TO-220AB Style 4	
<i>T2323B</i>	<i>2N6071</i>	<i>2N6071A</i>	<i>2N6071B</i>	T2500B	<b>200</b>
<i>T2323D</i>	<i>2N6073</i>	<i>2N6073A</i>	<i>2N6073B</i>	T2500D	<b>400</b>
<i>T2323M</i>	<i>2N6075</i>	<i>2N6075A</i>	<i>2N6075B</i>	T2500M	<b>600</b>
				T2500N	<b>800</b>
Maximum Electrical Characteristics					
25	30			60	I <sub>TSM</sub> (Amps)
25	30	5	3	25	I <sub>GT</sub> @ 25°C (mA)
40	—	5	3	60	MT2(+) <i>G</i> (+)
25	30	5	3	25	MT2(+) <i>G</i> (-)
40	—	10	5	60	MT2(-) <i>G</i> (-)
	@ -40°C	@ -40°C			V <sub>GT</sub> @ 25°C (V)
2.2	2.5	2.5		2.5	MT2(+) <i>G</i> (+)
2.2	—	2.5		2.5	MT2(+) <i>G</i> (-)
2.2	2.5	2.5		2.5	MT2(-) <i>G</i> (-)
2.2	—	2.5		2.5	MT2(-) <i>G</i> (+)
-40 to +110		-40 to +100			T <sub>J</sub> Operating Range (°C)

Devices listed in bold, italic are Motorola preferred devices.



# TRIACs (continued)

Table 2. TRIACs (continued)

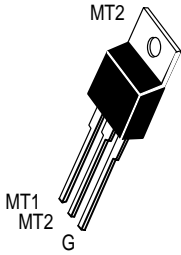
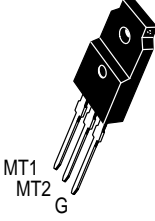

	On-State (RMS) Current							
	6 AMPS		8 AMPS					
	$T_C = 80^\circ\text{C}$	$T_C = 80^\circ\text{C}$	$T_C = 70^\circ\text{C}$	$T_C = 80^\circ\text{C}$				
								
$V_{DRM}$ (Volts)	Isolated 	Sensitive Gate			High Performance		Isolated 	
	Case 221C-02 Style 3	Case 221A-04 TO-220AB Style 4	Case 221A-06 TO-220AB Style 4			Case 221C-02 Style 3		
200	T2500BFP	MAC218A4				MAC218A4FP		
400	T2500DFP	MAC218A6	<b>MAC8SD</b>	<b>MAC8D</b>	<b>MAC9D</b>	MAC218A6FP		
600	T2500MFP	MAC218A8	<b>MAC8SM</b>	<b>MAC8M</b>	<b>MAC9M</b>	MAC218A8FP		
800	T2500NFP	MAC218A10	<b>MAC8SN</b>	<b>MAC8N</b>	<b>MAC9N</b>	MAC218A10FP		
Maximum Electrical Characteristics								
$I_{TSM}$ (Amps)	100		70		80		100	
$I_{GT}$ @ 25°C (mA)			Min.	Max.				
	MT2(+) <b>G(+)</b>	25	50	0.8	5.0	35	50	50
	MT2(+) <b>G(-)</b>	60	50	0.8	5.0	35	50	50
	MT2(-) <b>G(-)</b>	25	50	0.8	5.0	35	50	50
	MT2(-) <b>G(+)</b>	60	75(1)	—	—	—	—	75(1)
$V_{GT}$ @ 25°C (V)								
	MT2(+) <b>G(+)</b>	2.5	2	0.45	1.5	1.5	2	2
	MT2(+) <b>G(-)</b>	2.5	2	0.45	1.5	1.5	2	2
	MT2(-) <b>G(-)</b>	2.5	2	0.45	1.5	1.5	2	2
	MT2(-) <b>G(+)</b>	2.5	2.5(1)	—	—	—	—	2.5(1)
$DV/DT$ V/ $\mu\text{sec}$			Min.		Min.	Min.		
			25		250	500		
$T_J$ Operating Range (°C)	-40 to +100	-40 to +125	-40 to +110		-40 to +125			

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Devices listed in bold, italic are Motorola preferred devices.

# TRIACs (continued)

Table 2. TRIACs (continued)

On-State (RMS) Current				V <sub>DRM</sub> (Volts)
8 AMPS				
T <sub>C</sub> = 80°C				
				
		Isolated 		
Case 221A-04 TO-220AB Style 4		Case 221C-02 Style 3		
2N6342 2N6346	T2800B	MAC228A4	MAC228A4FP	200
2N6343 2N6347	T2800D	MAC228A6	MAC228A6FP	400
2N6344 2N6348	T2800M	MAC228A8	MAC228A8FP	600
2N6345 2N6349		MAC228A10	MAC228A10FP	800
Maximum Electrical Characteristics				
100		80		I <sub>TSM</sub> (Amps)
50 75 <sup>(6)</sup> 50 75 <sup>(6)</sup>	25 60 25 60	5 5 5 10 <sup>(1)</sup>	5 5 5 10 <sup>(1)</sup>	I <sub>GT</sub> @ 25°C (mA) MT2(+) G(+) MT2(+) G(-) MT2(-) G(-) MT2(-) G(+)
2 2.5 <sup>(6)</sup> 2.5 2.5 <sup>(6)</sup>	2.5 2.5 2.5 2.5	2 2 2 2.5 <sup>(1)</sup>		V <sub>GT</sub> @ 25°C (V) MT2(+) G(+) MT2(+) G(-) MT2(-) G(-) MT2(-) G(+)
-40 to +125	-40 to +100	-40 to +110		T <sub>J</sub> Operating Range (°C)

<sup>(6)</sup> Denotes 2N6346-49 Series only.

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# TRIACs (continued)


Table 2. TRIACs (continued)

V <sub>DRM</sub> (Volts)	On-State (RMS) Current				
	10 AMPS			12 AMPS	
	T <sub>C</sub> = 70°C		T <sub>C</sub> = 75°C	T <sub>C</sub> = 85°C	
	Isolated	Sensitive Gate	Isolated	Isolated	Isolated
Case 221A-04 TO-220AB Style 4	Case 221C-02 Style 3	Case 221A-04 TO-220AB Style 4	Case 221C-02 Style 3	Case 221A-04 TO-220AB Style 4	
200	MAC210A4	MAC210A4FP	MAC310A4	MAC212A4FP	MAC212A4
400	MAC210A6	MAC210A6FP	MAC310A6	MAC212A6FP	MAC212A6
600	MAC210A8	MAC210A8FP	MAC310A8	MAC212A8FP	MAC212A8
800	MAC210A10	MAC210A10FP	MAC310A10	MAC212A10FP	MAC212A10
Maximum Electrical Characteristics					
I <sub>TSM</sub> (Amps)	100				
I <sub>GT</sub> @ 25°C (mA)					
MT2(+)-G(+)	50		5		50
MT2(+)-G(-)	50		5		50
MT2(-)-G(-)	50		5		50
MT2(-)-G(+)	75(1)		10(1)		75(1)
V <sub>GT</sub> @ 25°C (V)					
MT2(+)-G(+)			2		
MT2(+)-G(-)			2		
MT2(-)-G(-)			2		
MT2(-)-G(+)			2.5(1)		
T <sub>J</sub> Operating Range (°C)			-40 to +125		

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# TRIACs (continued)

Table 2. TRIACs (continued)

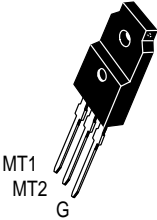
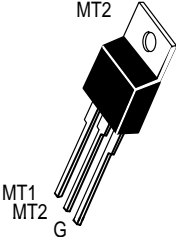
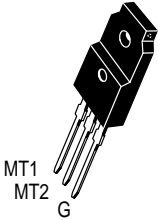
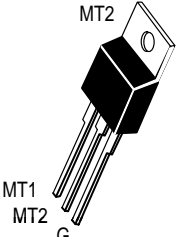


On-State (RMS) Current								
12 AMPS			15 AMPS					
T <sub>C</sub> = 80°C		T <sub>C</sub> = 70°C	T <sub>C</sub> = 90°C	T <sub>C</sub> = 80°C	T <sub>C</sub> = 90°C			
		Sensitive Gate		High Performance	High Performance	Isolated 		
Case 221A-04 TO-220AB Style 4	Case 221A-06 TO-220AB Style 4		Case 221A-04 TO-220AB Style 4	Case 221A-06 TO-220AB Style 4	Case 221C-02 Style 3		V <sub>DRM</sub> (Volts)	
2N6346A				MAC15A4		MAC15A4FP	200	
2N6347A	<b>MAC12D</b>	<b>MAC15D</b>	<b>MAC15SD</b>	MAC15A6	<b>MAC16D</b>	MAC15A6FP	400	
2N6348A	<b>MAC12M</b>	<b>MAC15M</b>	<b>MAC15SM</b>	MAC15A8	<b>MAC16M</b>	MAC15A8FP	600	
2N6349A	<b>MAC12N</b>	<b>MAC15N</b>	<b>MAC15SN</b>	MAC15A10	<b>MAC16N</b>	MAC15A10FP	800	
<b>Maximum Electrical Characteristics</b>								
120		150		120		150		I <sub>TSM</sub> (Amps)
				Min.	Max.			I <sub>GT</sub> @ 25°C (mA)
50		35		0.8	5.0	50		MT2(+) <b>G(+)</b>
75		35		0.8	5.0	50		MT2(+) <b>G(-)</b>
50		35		0.8	5.0	50		MT2(-) <b>G(-)</b>
75		—		—	—	75 <sup>(1)</sup>		MT2(-) <b>G(+)</b>
2		1.5		0.45	1.5	2		V <sub>GT</sub> @ 25°C (V)
2.5		1.5		0.45	1.5	2		MT2(+) <b>G(+)</b>
2		1.5		0.45	1.5	2		MT2(+) <b>G(-)</b>
2.5		—		—	—	2.5 <sup>(1)</sup>		MT2(-) <b>G(-)</b>
		Min.	Min.	Min.		Min.		DV/DT V/μsec
		250	250	25		500		
-40 to +125		-40 to +110		-40 to +125		T <sub>J</sub> Operating Range (°C)		


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Devices listed in bold, italic are Motorola preferred devices.

# TRIACs (continued)

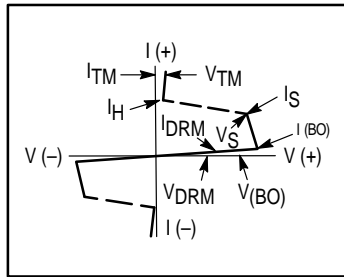
Table 2. TRIACs (continued)

V <sub>DRM</sub> (Volts)	On-State (RMS) Current					
	20 AMPS		25 AMPS		40 AMPS	
	T <sub>C</sub> = 75°C			T <sub>C</sub> = 80°C		T <sub>C</sub> = 75°C
						
	Isolated 		Isolated 			
	Case 221C-02 Style 3	Case 221A-04 TO-220AB Style 4		Case 221C-02 Style 3	Case 221A-04 TO-220AB Style 4	
200	MAC320A4FP	MAC320A4	MAC321-4	MAC223A4FP	<b>MAC223A4</b>	<b>MAC224A4</b>
400	MAC320A6FP	MAC320A6	MAC321-6	MAC223A6FP	<b>MAC223A6</b>	<b>MAC224A6</b>
600	MAC320A8FP	MAC320A8	MAC321-8	MAC223A8FP	<b>MAC223A8</b>	<b>MAC224A8</b>
800	MAC320A10FP	MAC320A10	MAC321-10	MAC223A10FP	<b>MAC223A10</b>	<b>MAC224A10</b>
Maximum Electrical Characteristics						
I <sub>TSM</sub> (Amps)	150		250		350	
I <sub>GT</sub> @ 25°C (mA)						
MT2(+)G(+)	50	100	50	50	50	75(1)
MT2(+)G(-)	50	100	50	50	50	75(1)
MT2(-)G(-)	50	100	50	50	50	75(1)
MT2(-)G(+)	75(1)	—	—	—	—	—
V <sub>GT</sub> @ 25°C (V)						
MT2(+)G(+)	2	2	2	2	2	2.5(1)
MT2(+)G(-)	2	2	2	2	2	2.5(1)
MT2(-)G(-)	2	2	2	2	2	2.5(1)
MT2(-)G(+)	2.5(1)	—	—	—	—	—
T <sub>J</sub> Operating Range (°C)	-40 to +125					

 Indicates UL Recognized — File #E69369

Devices listed in bold, italic are Motorola preferred devices.

# Thyristor Triggers



**Table 3. SIDACs**

High voltage trigger devices similar in operation to a Triac. Upon reaching the breakover voltage in either direction, the device switches to a low-voltage on-state.

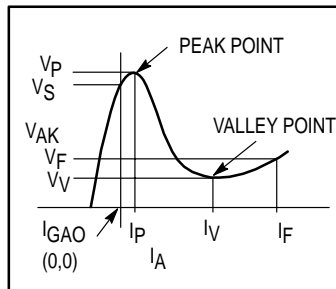
Device Type	I <sub>TSM</sub> Amps	V <sub>BO</sub> Volts	
		Min	Max

**Case 267-03/1**

<b>MKP3V110</b>	20	100	120
<b>MKP3V120</b>	20	110	130
<b>MKP3V130</b>	20	120	140

**Case 59-04/1**

<b>MKP1V120</b>	4	110	130
<b>MKP1V130</b>	4	120	140



**Table 4. Programmable Unijunction Transistor — PUT**

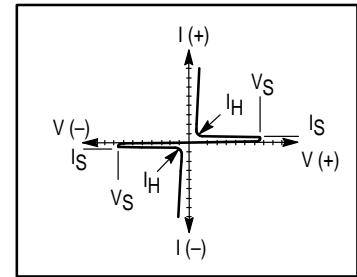
Similar to UJTs, except that  $I_V$ ,  $I_P$  and intrinsic standoff voltage are programmable (adjustable) by means of external voltage divider. This stabilizes circuit performance for variations in device parameters. General operating frequency range is from 0.01 Hz to 10 kHz, making them suitable for long-duration timer circuits.

Device Type	I <sub>P</sub>		I <sub>GAO</sub> @ 40 V nA Max	I <sub>V</sub>	
	R <sub>G</sub> = 10 kΩ	R <sub>G</sub> = 1 MΩ		R <sub>G</sub> = 10 kΩ	R <sub>G</sub> = 1 MΩ
	μA Max			μA Min	μA Max

**Plastic TO-92 (Case 29-04/16)**

<b>2N6027</b>	5	2	10	70	50
<b>2N6028</b>	1	0.15	10	25	25

Devices listed in bold, italic are Motorola preferred devices.



**Table 5. Silicon Bidirectional Switch (SBS)**

This versatile trigger device exhibits highly symmetrical bi-directional switching characteristics which can be modified by means of a gate lead. Requires a gate trigger current of only 250 μAdc for triggering.

Device Type	V <sub>S</sub> Volts		I <sub>S</sub> μA Max	I <sub>H</sub> mA Max
	Min	Max		

**Plastic TO-92/TO-226AA (Case 29-04/12)**

MBS4991	6	10	500	1.5
MBS4992	7.5	9	120	0.5
MBS4993	7.5	9	250	0.75

**Table 6. High Voltage Bidirectional TVS Devices Primary Protection**

Transient Voltage Suppression (TVS) devices are break-over-triggered crowbar protectors. Turn-off occurs when the surge current falls below the holding current value.

Device Type	I <sub>TSM</sub> Amps	V <sub>BR</sub> Volts (Min)	V <sub>BO</sub> Volts (Max)
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**Case 416A-01**

<b>MMT10V275</b>	100	200	275
<b>MMT10V400</b>	100	265	400

**Thyristor Surge Suppressors—Secondary Protection**

**Package SO-8**

<b>MGSS150-1</b>	30 AMP, 150 mA I <sub>H</sub> , Programmable Bidirectional Surge Suppressor
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**Package 8 Pin PDIP**

<b>MGSS150-2</b>	30 AMP, 150 mA I <sub>H</sub> , Programmable Bidirectional Surge Suppressor
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- Telecom Line Card Protection
- Dual Line Protection in a Single Package
- 2 Package Choices
- Bidirectional Capability
- 30 AMP Surge
- 150 mA I<sub>H</sub>
- Low Gate Trigger Current