



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

MML1225

MXL1225

TECHNICAL SPECIFICATIONS OF SENSITIVE GATE SILICON CONTROLLED RECTIFIERS
 VOLTAGE RANGE - 300 to 380 Volts CURRENT - 0.8 Ampere

Description

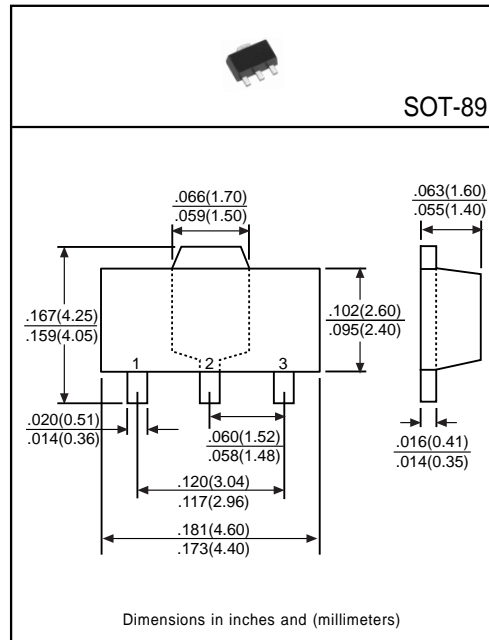
These Silicon Controlled Rectifiers are high performance planar diffused PNP devices. They are intended for low cost, high volume applications.

Pinning

- 1 = Gate
- 2 = Anode
- 3 = Cathode

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Peak Repetitive Off-State Voltage (RGK=1KΩ)	VDRM	300	V
On-State RMS Current (TC=40°C)	IT(RMS)	0.8	A
Peak Gate Current (10μs Max)	IGM	1	A
Gate Power Dissipation (20ms Max)	PG(AV)	0.1	W
Reverse Peak Gate Voltage	VGRM	8	V
Operating Junction Temperature	TJ	-40 to +125	°C
Storage Temperature	TSTG	-40 to +125	°C



Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Peak Repetitive Forward Off-State Blocking Current	IDRM	-	-	5	μA	VAK=Rated VDRM or VRRM RGK=1KΩ
		-	-	100		
Peak Forward On-State Voltage	VTM	-	-	1.4	V	ITM=0.4A Peak, TJ=25°C ITM=0.8A Peak, TJ=25°C
		-	-	2.2		
Continuous DC Gate Trigger Current	IGT	-	-	200	μA	VAK=7V DC, RL=100Ω
Continuous DC Gate Trigger Voltage	VGT	-	-	0.8	V	VAK=7V DC, RL=100Ω
DC Holding Current	IH	-	-	5	mA	RGK=1KΩ, Gate Open
DC Latching Current	IL	-	-	6	mA	RGK=1KΩ, Gate Open
Critical Rate-of-Rise of Off-State Voltage	dv/dt	25	-	-	V/μS	VD=0.67VDRM, RGK=1KΩ, TJ=125°C
Critical Rate-of-Rise of Off-State Current	di/dt	30	-	-	A/μS	Ig=10mA, di/dt=0.1A/μS, TJ=125°C
Gate Controlled Delay Time	Tgd	-	-	0.5	μsec	Ig=10mA, di/dt=0.1A/μS
Thermal Resistance, Junction to Case	RθJC	100	-	-	°C/W	-