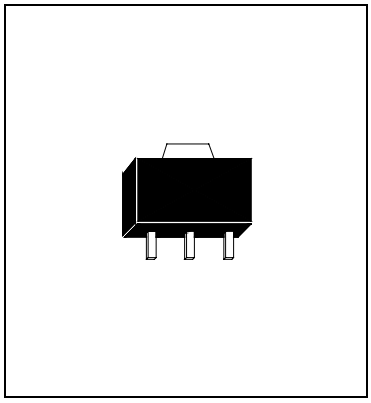
HMX1225
HMM1225

0.8A 300/380 VOLTAGE SCRS IGT<200uA



Description

The HMX1225/HMM1225 series silicon controlled rectifiers are high performance planner diffused PNPN devices. These parts are intended for low cost high volume applications.

Absolute Maximum Ratings (Ta=25°C)

Parameter	Part No.	Symbol	Min.	Max.	Unit	Test Conditions
Repetitive Peak Off State Voltage	HMX1225 HMM1225	VDRM VDRM	380 300	- -	V V	Tj=40°C to 125°C (RGK=1K)
On-State Current		IT(rms)	0.8	-	A	TC=40°C
Average On-State Current		IT(AV)	0.5	-	A	Half Cycle=180°,TC=40°C
Peak Reverse Gate Voltage		VGRM	8	-	V	IGR=10uA
Peak Gate Current		IGM	1	-	A	10us max
Gate Dissipation		PG(AV)	0.1	-	W	20ms max
Operating Temperature		Tj	-40	125	°C	
Storage Temperature		Tstg	-40	125	°C	
Soldering Temperature		Tsld	-	250	°C	1.6mm from case 10s max

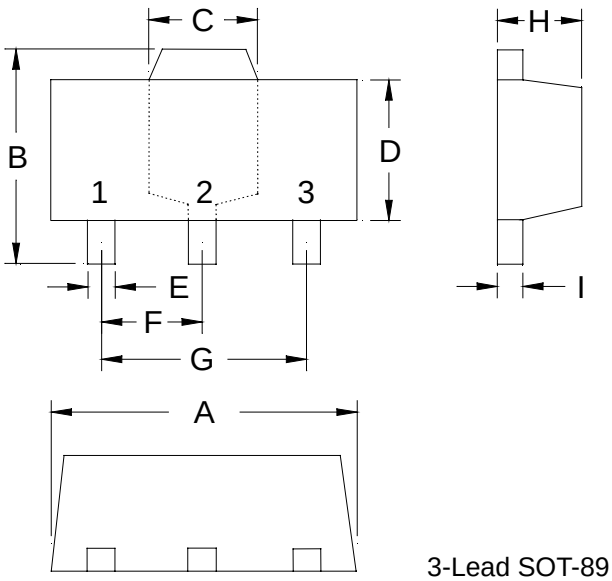
Classification Of IGT

Rank	A	C
HMX1225	10-23 uA	17-55 uA
HMM1225	10-23 uA	17-55 uA

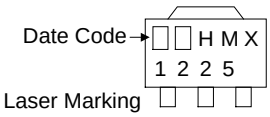
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Min	Max	Unit	Test Conditions
Off-State Leakage Current	IDRM	-	0.1	mA	@VDRM (RGK=1K), Tj=125°C
Off-State Leakage Current	IDRM	-	5	uA	@VDRM (RGK=1K), Tj=25°C
On-State Voltage	VT	-	1.4	V	at IT=0.4A, Tj=25°C
		-	2.2	V	at IT=0.8A, Tj=25°C
On-State Threshold Voltage	VT(TO)	-	0.95	V	Tj=125°C
On-State Slops Resistance	rT	-	600	Ohm	Tj=125°C
Gate Trigger Current	IGT	-	200	uA	VD=7V
Gate Trigger Voltage	VGT	-	0.8	V	VD=7V
Holding Current	IH	-	5	mA	RGK=1K(ohm)
Latching Current	IL	-	6	mA	RGK=1K(ohm)
Critical Rate of Voltage Rise	dv/dt	25	-	V/us	VD=0.67*VDRM(RGK=1K), Tj=125°C
Crtical Rate of Current Rise	di/dt	30	-	A/us	IG=10mA,diG/dt=0.1A/us, Tj=125°C
Gate Controlled Delay Time	tgd	-	500	ns	IG=10mA,diG/dt=0.1A/us
Commutated Turn-off Time	tg	-	200	us	Tc=85°C,VD=0.67*VDRM VR=35V,IT=IT(AV)
Thermal Resistance junc.to case	Rθjc	100	-	K/W	
Thermal Resistance junc. to amb	Rθja	200	-	K/W	

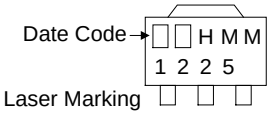
SOT-89 Dimension



HMX1225 Marking:



HMM1225 Marking:



Style: Pin 1.Gate 2.Anode 3.Cathode

3-Lead SOT-89 Plastic Surface Mounted Package
HSMC Package Code: M

*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0583	0.0598	1.48	1.52
B	0.1594	0.1673	4.05	4.25	G	0.1165	0.1197	2.96	3.04
C	0.0591	0.0663	1.50	1.70	H	0.0551	0.0630	1.40	1.60
D	0.0945	0.1024	2.40	2.60	I	0.0138	0.0161	0.35	0.41
E	0.0141	0.0201	0.36	0.51					

Notes: 1.Dimension and tolerance based on our Spec. dated May. 05,1996.
2.Controlling dimension: millimeters.
3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

Head Office And Factory:

- **Head Office** (Hi-Sincerity Microelectronics Corp.): 10F.,No. 61, Sec. 2, Chung-Shan N. Rd. Taipei Taiwan R.O.C.
  Tel: 886-2-25212056 Fax: 886-2-25632712, 25368454
- **Factory 1:** No. 38, Kuang Fu S. Rd., Fu-Kou Hsin-Chu Industrial Park Hsin-Chu Taiwan. R.O.C
  Tel: 886-3-5983621~5 Fax: 886-3-5982931

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