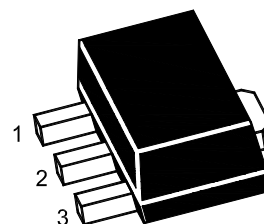


Equivalent Circuit



SOT-89



1.Cathode(K) 2.Anode(A) 3.Gate(G)

Marking Code : X121

Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Peak Repetitive Off-State Voltage ($I_{DRM}/I_{RRM}=10\ \mu A$)	V_{DSM}	1200	V
Peak Repetitive Reverse Voltage ($I_{DRM}/I_{RRM}=10\ \mu A$)	V_{DSM}	1200	V
On-State RMS Current	$I_{T(RMS)}$	1	A
Peak Non-Repetitive Surge Current ($f=50\ Hz$)	I_{TSM}	15	A
Circuit Fusing Considerations ($t=8.3\ ms$)	I^2t	1.6	A ² s
Forward Peak Gate Power	P_{GM}	0.3	W
Forward Peak Average Gate Power	$P_{G(AV)}$	0.5	W
Peak Gate Current	I_{GM}	1	A
Operating Junction Temperature Range ^{Note1}	T_J	-40 to +125	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C

Note:

1. When we parallel connect a $\leq 1K\Omega$ resistor between Gate and Cathode, the T_J can reach 125°C; if without this resistor, the T_J only can reach 110°C.

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance Junction to Case	$R_{\theta JC}$	45	°C/W



PJX121SQ

Silicon Controlled Rectifiers

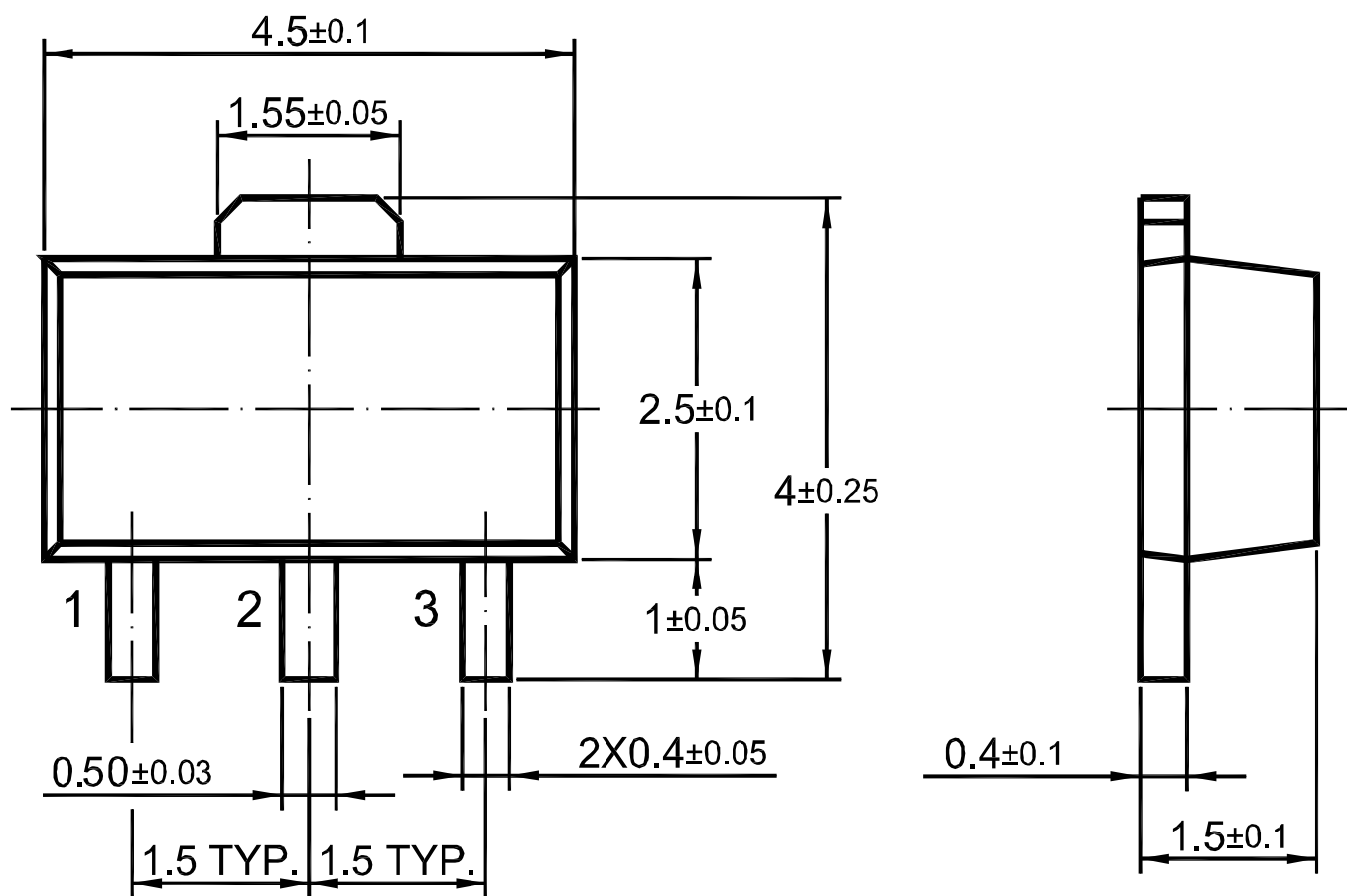
Electrical Characteristics (T_A=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Forward or Reverse Blocking Current V _{DRM} / V _{RRM} = 1000 V	I _{DRM} , I _{RRM}	--	--	1	μA
Peak Forward On-State Voltage at I _{TM} = 1.5 A, t _p = 380 μs	V _{TM}	--	--	1.55	V
Gate Trigger Current at V _D = 12 V, R _L = 33 Ω	I _{GT}	20	40	200	μA
Gate Trigger Voltage at V _D = 12 V, R _L = 33 Ω	V _{GT}	--	0.6	0.8	V
Holding Current at I _T = 50 mA	I _H	--	--	3	mA
Latch Current at I _G = 1.2 I _{GT}	I _L	--	--	4	mA

Package Outline

SOT-89

Dimensions in mm



Ordering Information

Device	Package	Shipping
PJX121SQ	SOT-89	3,000PCS/Reel&13inches