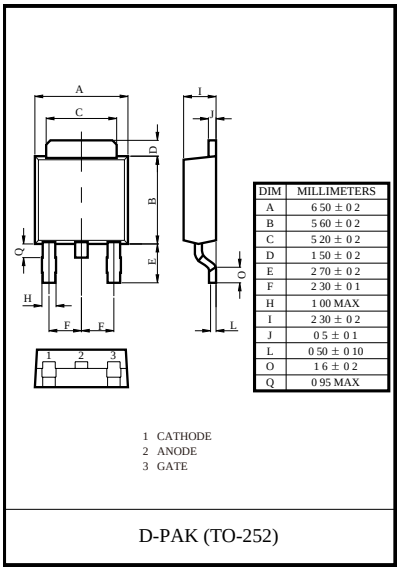
Silicon Planar PNPN Thyristor (4A SCR)



D-PAK (TO-252)

DESCRIPTION

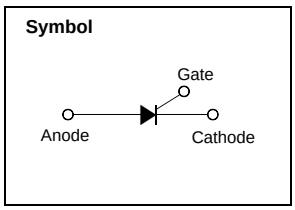
Thyristor in a TO-252 Package.

FEATURES

- The consumption level provide reliable applications, such as temperature, lighting, speed, etc.

APPLICATIONS

- Applied to high Voltage control circuit.



Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Test Conditions		Rating	Unit
Repetitive peak off-state voltages	V_{DRM}, V_{RRM}	R_{GK}=1K T_C=-40~110℃	C106DB C106DD C106DM	200 400 600	V
RMS on-state current	$I_{T(RMS)}$	T_C=80℃		4	A
Average on-state current	$I_{T(AV)}$	T_C=80℃		2.55	A
Non-repetitive peak on-state current	I_{TSM}	1/2 Cycle, Sine Wave,60Hz, T_J=110℃		20	A
I^2t for fusing	I^2t	t=8.3ms		1.65	A^2S
Peak gate power	P_{GM}	T_C=80℃		500	mW
Peak Average power	$P_{G(AV)}$	T_C=80℃		100	mW
Peak gate current	I_{GM}	T_C=80℃		0.2	A
Junction Temperature	T_j			-40～+110	℃
Storage Temperature Range	T_{stg}			-40～+150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Repetitive peak off-state current	I_{DRM}, I_{RRM}	V_{AK}=Rated V_{DRM} or V_{RRM} R_{GK}=1KΩ	Tc =25℃			10	μA
			Tc=110℃			100	
On-state voltage	V_{TM}	I_{TM}=4.0A tp=380uS				2.2	V
Gate trigger current	I_{GT}	V_{AK}=6.0Vdc R_L=100Ω	Tc =25℃		15	200	μA
			Tc=-40℃		35	500	
Gate trigger voltage	V_{GT}	V_{AK}=6.0Vdc R_L=100Ω	Tc =25℃	0.4	0.60	0.80	V
			Tc =-40℃	0.5	0.75	1.00	
Holding current	I_H	V_{AK}=12.0Vdc R_{GK}=1KΩ	Tc =25℃		0.19	3.0	mA
			Tc =-40℃		0.33	6.0	
			Tc=110℃		0.07	2.0	
Latching current	I_L	V_{AK}=12.0Vdc I_G=20mA	Tc =25℃		0.20	5.0	mA
			Tc =-40℃		0.35	7.0	
Critical rate of rise of off-state voltage	dv/dt	V_{AK}=Rated V_{DRM}, R_{GK}=1KΩ T_C=110℃			8.0		V/us

Typical Characteristics

