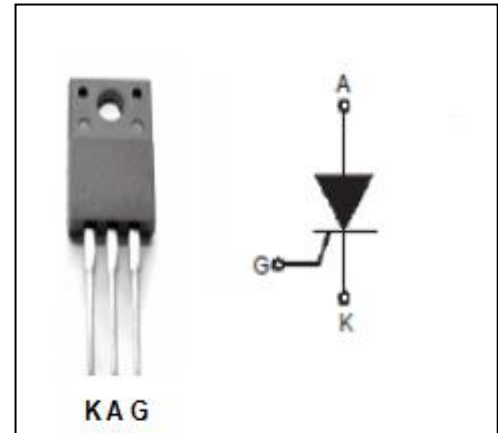


**isc Thyristors**
**CS22-12IO1M**
**DESCRIPTION**

- With TO-220F packaging
- Long-term stability
- Thyristor for line frequency
- Planar passivated chip
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching applications
- AC power controller
- Motor control
- Power converter


**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	1200	V
V <sub>RRM</sub>	Repetitive peak reverse voltage	1200	V
I <sub>T(AV)</sub>	Average forward current T <sub>c</sub> =85°C	16	A
I <sub>TSM</sub>	Surge non-repetitive on-state current ( 1/2 cycle,sine wave;T <sub>c</sub> =45°C )	300 340	A
P <sub>G(AV)</sub>	Average gate power dissipation	0.5	W
T <sub>j</sub>	Operating junction temperature	-40~125	°C
T <sub>stg</sub>	Storage temperature	-40~150	°C

**isc Thyristors**
**CS22-12IO1M**
**ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$  unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
$I_{RRM}$	Repetitive peak reverse current	$V_{RM}=V_{RRM}$ $V_{DM}=V_{DRM}$	$T_j=25^\circ\text{C}$		5	mA
$I_{DRM}$	Repetitive peak off-state current					
$V_{TM}$	On-state voltage	$I_{TM}=30\text{A}$			1.5	V
$I_{GT}$	Gate-trigger current	$V_D=6\text{V}$			30	mA
$V_{GT}$	Gate-trigger voltage	$V_D=6\text{V}$			1.5	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			2.5	$^\circ\text{C}/\text{W}$

**NOTICE:**

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