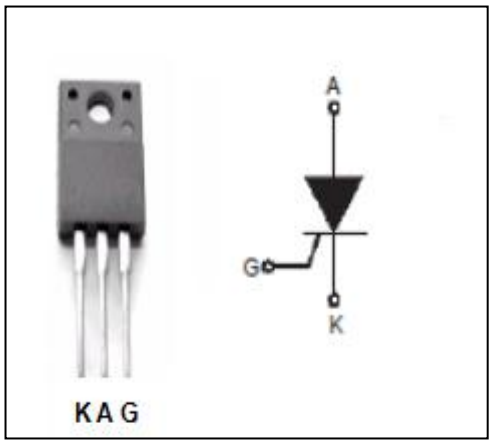
isc Thyristors — CMA30E1600PN

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
- Line rectifying 50/60 Hz

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage		1700	V
V_{RRM}	Repetitive peak reverse voltage		1600	V
$I_{T(AV)}$	Average forward current	Tc=40℃	23	A
$I_{T(RMS)}$	RMS on-state current		36	A
I_{TSM}	Surge non-repetitive on-state current (1/2 cycle,sine wave;Tc=45℃)	50HZ 60HZ	260 280	A
$P_{G(AV)}$	Average gate power dissipation		0.5	W
T_j	Operating junction temperature		-40~125	℃
T_{stg}	Storage temperature		-40~150	℃

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ELECTRICAL CHARACTERISTICS (T_C=25℃ 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℃ T_j=125℃		0.01 2	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage	I_{TM}= 30A			1.42	V
I_{GT}	Gate-trigger current	V_D = 6V; RL=100Ω			28	mA
V_{GT}	Gate-trigger voltage	V_D = 6V; RL=100Ω			1.3	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			2.5	℃/W

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