

isc Thyristors

CMA30E1600PB

DESCRIPTION

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

G K K A G TO-220

APPLICATIONS

- Switching applications
- Line rectifying 50/60 Hz



SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	1600	V
V _{RRM}	Repetitive peak reverse voltage	1600	V
I _{T(AV)}	Average forward current Tc=40°C	30	А
I _{T(RMS)}	RMS on-state current	36	Α
I _{TSM}	Surge non-repetitive on-state current 50HZ ($1/2$ cycle,sine wave;Tc= 45° C) 60HZ	260 280	A
$P_{G(AV)}$	Average gate power dissipation	0.5	W
Tj	Operating junction temperature	-40~125	$^{\circ}$
T _{stg}	Storage temperature	-40~150	$^{\circ}$



isc Thyristors

CMA30E1600PB

ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I _{RRM}	Repetitive peak reverse current	V _{RM} =V _{RRM}	T _j =25℃		0.01	mA
I _{DRM}	Repetitive peak off-state current	V _{DM} =V _{DRM}	T _j =125℃		2	
V_{TM}	On-state voltage	I _{TM} = 30A I _{TM} = 60A			1.42 1.80	V
I _{GT}	Gate-trigger current	V _D = 6V; RL=100 Ω			28	mA
V_{GT}	Gate-trigger voltage	V _D = 6V; RL=100 Ω			1.3	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			2.5	°C/W

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.