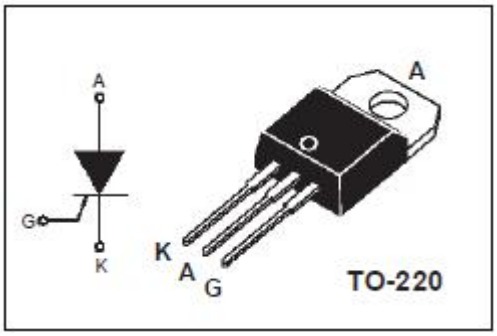
isc Thyristors — MCR310-10G

DESCRIPTION

- With TO-220 packaging
- High heat dissipation and durability
- Thermowatt construction for low thermal
- Glass passivated junctions and center gate fire for greater parameter uniformity and stability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage		800	V
V_{RRM}	Repetitive peak reverse voltage		800	V
$I_{T(RMS)}$	RMS on-state current	Tc=70℃	10	A
I_{TSM}	Surge non-repetitive on-state current (1/2 cycle,sine wave;60HZ;Tc=125℃)		100	A
$P_{G(AV)}$	Average gate power dissipation	Tp=8.3ms;Tc=70℃	0.75	W
T_j	Operating junction temperature		-40~110	℃
T_{stg}	Storage temperature		-40~150	℃

ELECTRICAL CHARACTERISTICS (T_C=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℃		5.0	
V_{TM}	On-state voltage	I_{TM}= 20A			2.2	V
I_{GT}	Gate-trigger current	V_D = 12 V; RL=100Ω			200	mA
V_{GT}	Gate-trigger voltage	V_D = 12 V; RL=100Ω			1.5	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			2.2	℃/W

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