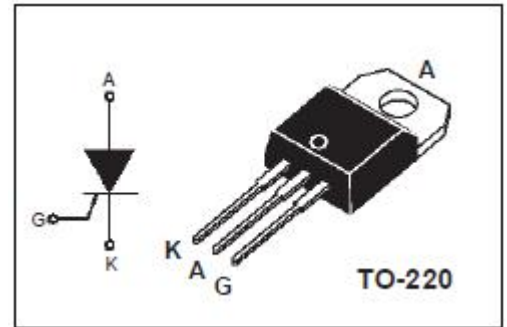


isc Thyristors
S8012R
DESCRIPTION

- 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°C)

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 T _c =105°C	12	A
I _{TSM}	Surge non-repetitive on-state current (1/2 cycle,sine wave;T _c =25°C)	50Hz 120 60Hz 100	A
P _{G(AV)}	Average gate power dissipation	0.5	W
T _j	Operating junction temperature	-40~125	°C
T _{stg}	Storage temperature	-40~150	°C

ELECTRICAL CHARACTERISTICS (T_c=25°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°C T _j =100°C T _j =125°C		0.02	mA
I _{DRM}	Repetitive peak off-state current			0.5 1	
V _{TM}	On-state voltage	I _{TM} = 12A		1.6	V
I _{GT}	Gate-trigger current	V _D = 12 V; R _L =33 Ω	1	20	mA
V _{GT}	Gate-trigger voltage	V _D = 12 V; R _L =33 Ω		1.5	V
R _{th(j-c)}	Thermal resistance	Junction to case		1.3	°C/W

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