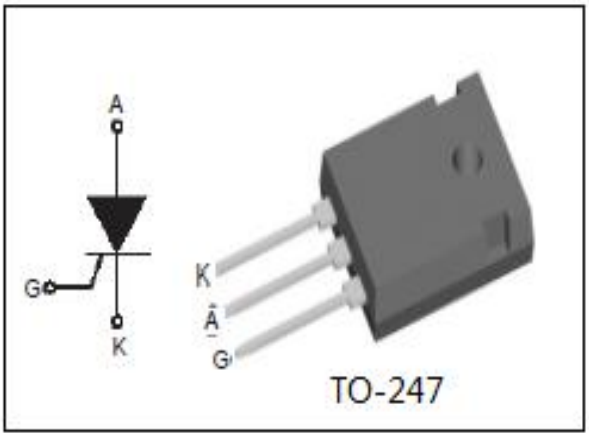
isc Thyristors 70TPS16

DESCRIPTION

- With TO-247 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		1600	V
V_{RRM}	Repetitive peak reverse voltage		1600	V
$I_{T(AV)}$	Average forward current	@Tc=150℃	70	A
$I_{T(RMS)}$	RMS on-state current		75	A
I_{TSM}	Surge non-repetitive on-state current (1/2 cycle,sine wave)		1400	A
$P_{G(AV)}$	Average gate power dissipation		0.5	W
T_j	Operating junction temperature		-40~125	℃
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℃		1	mA
I_{DRM}	Repetitive peak off-state current	$V_{DM}=V_{DRM}$	T_j=125℃		15	
V_{TM}	On-state voltage	I_{TM}= 100A			1.4	V
I_{GT}	Gate-trigger current	V_D = 6V			100	mA
V_{GT}	Gate-trigger voltage	V_D = 6V			1.5	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			0.27	℃/W

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