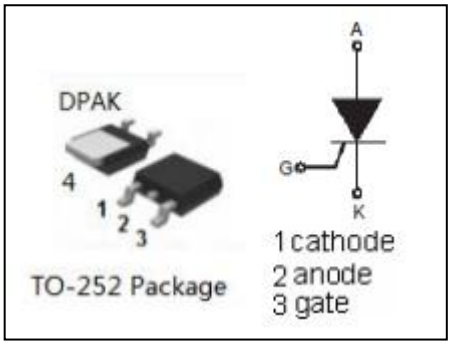
isc Thyristors S6012D

APPLICATIONS

- With TO-252 (DPAK)package
- Highly sensitive triggering levels
- For capacitive discharge ignitions, motor control in kitchen aids, overvoltage crowbar protection in low power supplies applications.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{T(RMS)}$	RMS on-state current		12	A
$I_{T(AV)}$	Average on-state current		7.6	A
I_{TSM}	Surge non-repetitive on-state current	50HZ	255	A
		60HZ	300	
$I_{T(AV)}$	On-state current 180° conduction angle		7.6	A
I_{TSM}	Non-repetitive surge peak on-state current t= 20ms		12	A
$P_{G(AV)}$	Average gate power dissipation		0.5	W
T_j	Junction temperature		125	℃
T_{stg}	Storage temperature		-40 to + 150	℃

ELECTRICAL CHARACTERISTICS (T_C=25℃ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{RM}=V_{RRM}$, $V_{DM}=V_{DRM}$,	Tj=25℃ Tj=100℃ Tj=125℃		0.01 0.5 1	mA
I_{DRM}	Repetitive peak off-state current					
V_{TM}	On-state voltage				1.6	V
I_{GT}	Gate-trigger current	V_D =12V;RL=60Ω;			20	mA
V_{GT}	Gate-trigger voltage	V_D =12V;RL=60Ω;			1.5	V