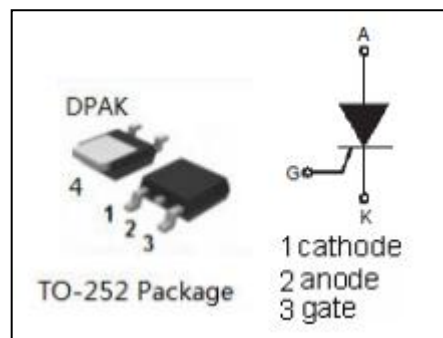


isc Thyristors

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($T_a=25^{\circ}\text{C}$)

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

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{RM}=V_{RRM}$, $V_{DM}=V_{DRM}$,	$T_j=25^\circ\text{C}$		0.01	mA
I_{DRM}	Repetitive peak off-state current		$T_j=100^\circ\text{C}$ $T_j=125^\circ\text{C}$		0.5 1	
V_{TM}	On-state voltage				1.6	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; R_L=60\ \Omega$;			20	mA
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; R_L=60\ \Omega$;			1.5	V

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