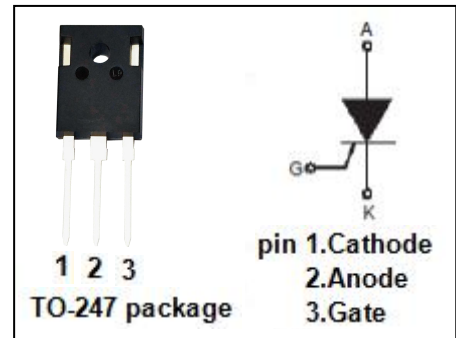


isc Thyristors

CS60-14IO1

APPLICATIONS

- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

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

SYMBOL	PARAMETER	MAX	UNIT
V_{DRM}/V_{RRM}	Repetitive peak off-state voltage	1500	V
$I_{T(AV)}$	Average on-state current	60	A
$I_{T(RMS)}$	RMS on-state current	75	A
I_{TSM}	Surge non-repetitive on-state current $t_p=10\text{ms}$	1.4	KA
$P_{G(AV)}$	Average gate power dissipation	0.5	W
T_j	Operating junction temperature	-40~140	$^\circ\text{C}$
T_{stg}	Storage temperature	-40~140	$^\circ\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_{RRM}/I_{DRM}	Repetitive peak off-state current	$V_{RM}=V_{RRM}, R_{GK}=220\ \Omega,$	$T_j=25^\circ\text{C}$	200	μA
			$T_j=140^\circ\text{C}$	10	mA
V_{TM}	On-state voltage	$I_{TM}=60\text{A}$ $I_{TM}=60\text{A}; T_j=125^\circ\text{C}$		1.18	V
				1.14	
I_{GT}	Gate-trigger current	$V_D=6\text{V}; I_T=0.1\text{A}$		100	mA
V_{GT}	Gate-trigger voltage	$V_D=6\text{V}; I_T=0.1\text{A}$		1.5	V
I_H	Holding current	$I_{GT}=0.1\text{A}, V_D=6\text{V}$		200	mA
$R_{th(j-c)}$	Thermal resistance	Junction to case		1.3	$^\circ\text{C}/\text{W}$

NOTICE:

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