

isc Thyristors

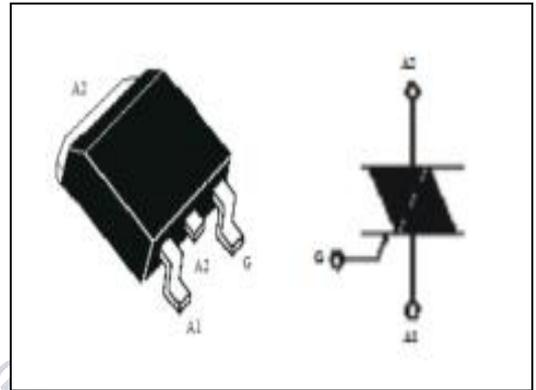
Q6016NH4

DESCRIPTION

- With TO-263(D2PAK) packaging
- Operating in 3 quadrants
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching applications
- Phase control
- Static switching on inductive or resistive load



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

SYMBOL	PARAMETER		MAX	UNIT
V_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{\text{T(RSM)}}$	Average on-state current		16	A
I_{TSM}	Surge non-repetitive on-state current	50HZ 60HZ	200 167	A
$P_{\text{G(AV)}}$	Average gate power dissipation (over any 20 ms period)		0.5	W
T_j	Operating junction temperature		-40~125	$^\circ\text{C}$
T_{stg}	Storage temperature		-40~150	$^\circ\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_R=V_{\text{RRM}}$ Rated; $V_D=V_{\text{DRM}}$ Rated;	$T_j=25^\circ\text{C}$		0.05	mA
I_{DRM}	Repetitive peak off-state current		$T_j=100^\circ\text{C}$ $T_j=125^\circ\text{C}$		0.5 2	
V_{TM}	On-state voltage	$I_T=12\text{A}$			2.0	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; \text{RL}=20\ \Omega$	I		35	mA
			II		35	
			III		35	
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; \text{RL}=20\ \Omega$			1.5	V
$R_{\text{th (j-mb)}}$	Junction to mounting base	Half cycle			1.2	$^\circ\text{C/W}$

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