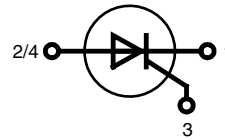
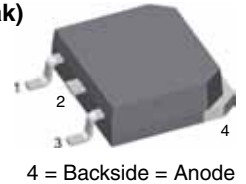


High Voltage Phase Control Thyristor

$$V_{\text{DRM}} = 2500 \text{ V}$$

$$I_{\text{TSM}} = 200 \text{ A}$$


TO-268 AA (D³Pak)


Thyristor				
Symbol	Conditions	Maximum Ratings		
V_{DRM}		2500	V	
V_{DSM}		2500	V	
$V_{\text{RRM}} / \text{RSM}$		1650	V	
I_{TSM}	sine 180°; t = 10 ms; $V_{\text{R}} = 0 \text{ V}$; $T_{\text{VJ}} = 25^\circ\text{C}$	200	A	
$(di/dt)_{\text{cr}}$	f = 50 Hz; $t_{\text{p}} = 200 \mu\text{s}$; $V_{\text{D}} = 2000 \text{ V}$ $di_{\text{G}}/dt = 0.45 \text{ A}/\mu\text{s}$; $I_{\text{G}} = 0.45 \text{ A}$ non repetitive; $I_{\text{T}} = 45 \text{ A}$	150	A/ μs	
$(dv/dt)_{\text{cr}}$	$V_{\text{D}} = 2200 \text{ V}$ $R_{\text{GK}} = \infty$; method 1 (linear voltage rise)	5000	V/ μs	
Symbol	Conditions	Characteristic Values		
		min.	max.	
V_{T}	$I_{\text{T}} = 45 \text{ A}$ $T_{\text{VJ}} = 25^\circ\text{C}$		3.0	V
V_{GT} I_{GT}	$V_{\text{D}} = 6 \text{ V}$ $T_{\text{VJ}} = 25^\circ\text{C}$		2.5 250	V mA
V_{GD} I_{GD}	$V_{\text{D}} = \frac{2}{3} V_{\text{DRM}}$ $T_{\text{VJ}} = 25^\circ\text{C}$		0.2 5	V mA
I_{L}	$t_{\text{p}} = 10 \mu\text{s}$; $V_{\text{D}} = 6 \text{ V}$ $I_{\text{G}} = 0.45 \text{ A}$; $di_{\text{G}}/dt = 0.45 \text{ A}/\mu\text{s}$ $T_{\text{VJ}} = 0^\circ\text{C}$		700	mA
I_{H}	$V_{\text{D}} = 6 \text{ V}$; $R_{\text{GK}} = \infty$ $T_{\text{VJ}} = 0^\circ\text{C}$ $T_{\text{VJ}} = 70^\circ\text{C}$	55	300	mA mA
t_{q}	$I_{\text{T}} = 20 \text{ A}$; $t_{\text{p}} = 300 \mu\text{s}$; $di/dt = -20 \text{ A}/\mu\text{s}$ $V_{\text{R}} = 10 \text{ V}$; $dv/dt = 20 \text{ V}/\mu\text{s}$ $V_{\text{D}} = 800 \text{ V}$ $T_{\text{VJ}} = 70^\circ\text{C}$		100	μs
$I_{\text{RRM}} / \text{DRM}$	$V_{\text{R}} = V_{\text{RRM}}$; $V_{\text{D}} = V_{\text{DRM}}$ $T_{\text{VJ}} = 25^\circ\text{C}$ $T_{\text{VJ}} = 70^\circ\text{C}$		50 200	μA μA
$I_{\text{DSM}} / \text{RSM}$	$V_{\text{R}} = V_{\text{RSM}}$; $V_{\text{D}} = V_{\text{DSM}}$ $T_{\text{VJ}} = 70^\circ\text{C}$		2	mA
R_{thJC}			0.80	K/W

Features

- high voltage thyristor
 - for line frequency
 - chip technology for long term stability
 - planar glass passivated
- International standard package
JEDEC TO-268
- Epoxy meets UL 94V-0

Applications

- controlled rectifiers
 - power supplies
 - drives
- AC switches
- capacitor discharge control
 - flash tubes
 - X-ray and laser generators

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