



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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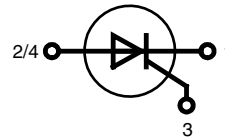
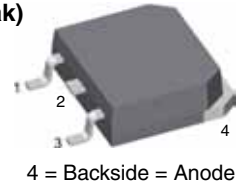
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High Voltage Phase Control Thyristor

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

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


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 V 250 mA
V_{GD} I_{GD}	$V_{\text{D}} = \frac{2}{3} V_{\text{DRM}}$ $T_{\text{VJ}} = 25^\circ\text{C}$		0.2 V 5 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 μA 200 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

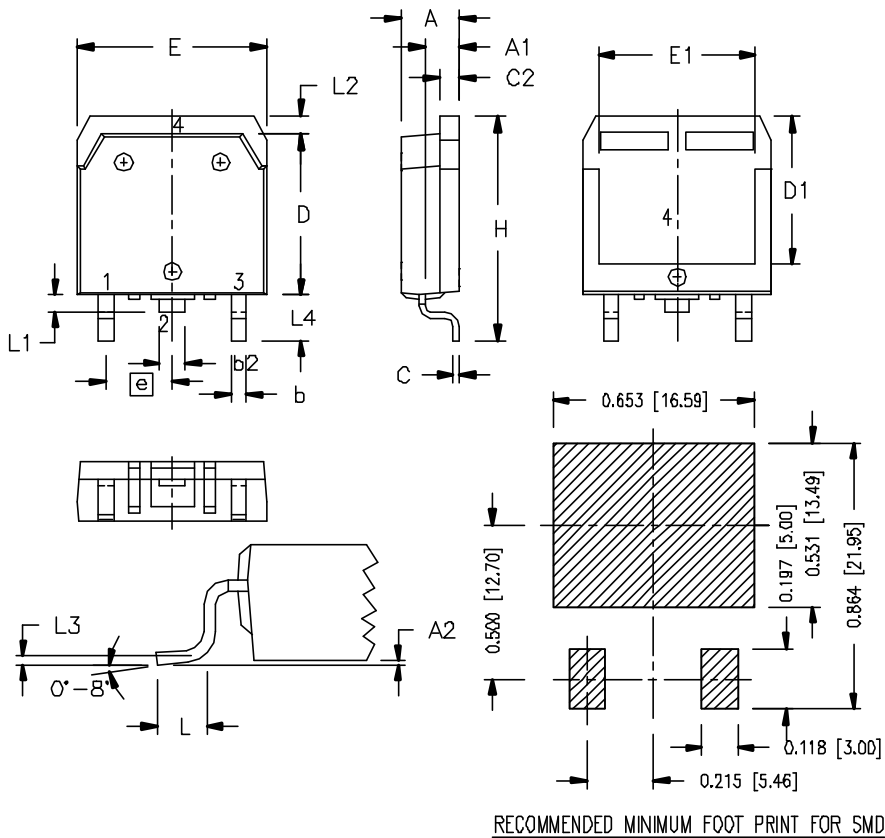
- high voltage thyristor
 - for line frequency
 - chip technology for long term stability
 - planar glass passivated
- International standard package
JEDEC TO-268
- Epoxy meets UL 94V-0

Applications

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

Component			
Symbol	Conditions	Maximum Ratings	
T_{VJ}		-10 ... +70	°C
T_{stg}		-40 ... +70	°C
F_c	Mounting force with clip	20...120	N

Symbol	Conditions	Characteristic Values		
		min.	typ.	max.
R_{thCH}	with heatsink compound		0.15	
Weight			5	



Dim.	Millimeter		Inches	
	min	max	min	max
A	4.90	5.10	0.193	0.201
A1	2.70	2.90	0.106	0.114
A2	0.02	0.25	0.001	0.100
b	1.15	1.45	0.045	0.057
b2	1.90	2.10	0.075	0.083
C	0.40	0.65	0.016	0.026
C2	1.45	1.60	0.057	0.063
D	13.80	14.00	0.543	0.551
D1	12.40	12.70	0.488	0.500
E	15.85	16.05	0.624	0.632
E1	13.30	13.60	0.524	0.535
e	5.45 BSC		0.215 BSC	
H	18.70	19.10	0.736	0.752
L	2.40	2.70	0.094	0.106
L1	1.20	1.40	0.047	0.055
L2	1.00	1.15	0.039	0.045
L3	0.25 BSC		0.100 BSC	
L4	3.80	4.10	0.150	0.161