

SIDAC SILICON UNIDIRECTIONAL THYRISTORS	1 AMPERE 200 VOLTS
--	-------------------------------

FEATURES

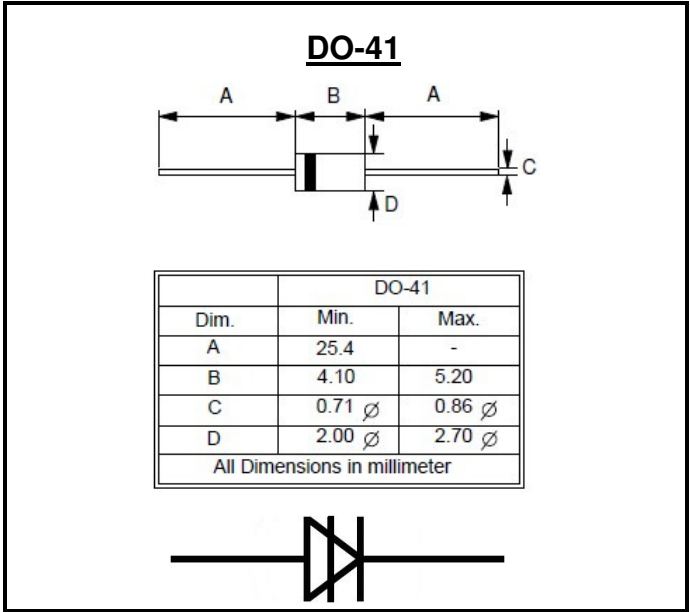
- V_{BO} range is from 190 to 210 Vdc
- V_{DRM} with stand 170V
- I_H is under 60 mA
- Compact package for spacing saving.

Application

- Gas Igniters

MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic
- Terminals: Lead Free Plating
- Component in accordance to RoHs 2011/65/EU



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATING

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Peak repetitive off-state voltage	$T_J = -40$ to 125°C , sine wave, 50 to 60 Hz	V_{DRM}	170	V	
On-state RMS current	$T_L = 80^\circ\text{C}$, all conduction angles	$I_{T(RMS)}$	1	A	
Pulse on-state current	$T_a = 25^\circ\text{C}$, pulse width to = 10 μs , sine wave, repetitive peak value	I_{TRM}	f=5Hz	330	A
			f=60Hz	190	
Maximum lead solder temperature (Lead length $\geq 1/16$ " from case, 10s max)		T_L	260	$^\circ\text{C}$	
Operating junction temperature range		T_J	-40 ~ +125	$^\circ\text{C}$	
Storage temperature range		T_{STG}	-40 ~ +150	$^\circ\text{C}$	

THERMAL PERFORMANCE

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance junction to case	R_{thJc}	15	$^\circ\text{C/W}$

OFF CHARACTERISTICS

PARAMETER	SYMBOL	MAX	UNIT
Peak repetitive forward or reverse blocking current (50 to 60 Hz) $V_{DRM}=170\text{V}$	I_{DRM}	10	μA

ON CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	MIN	TYP.	MAX	UNIT
Peak on-state voltage	$I_T = 1 \text{ A}$	V_{TM}	--	1.1	1.5	V
Breakover voltage	$I_{BO} = 5 \mu\text{A}$	V_{BO}	190	200	210	V
Breakover current		I_{BO}	--	--	200	μA
Holding current		I_H	--	--	60	mA
Switching resistance		R_s	0.1	--	--	$\text{k}\Omega$

ON CHARACTERISTICS

PARAMETER	SYMBOL	MIN	TYP.	MAX	UNIT
Critical rate of rise of on-state current	di/dt	--	80	--	A/ μs

Note :

Maximum ratings are those values beyond which device damage can occur. Maximum ratings applied to the device are individual stress limit values (not normal operating conditions) and are not valid simultaneously. If these limits are exceeded, device functional operation is not implied, damage may occur and reliability may be affected.

REV- 0, JAN.-2016, KDXD14

Fig.1- TYPICAL ON-STATE VOLTAGE

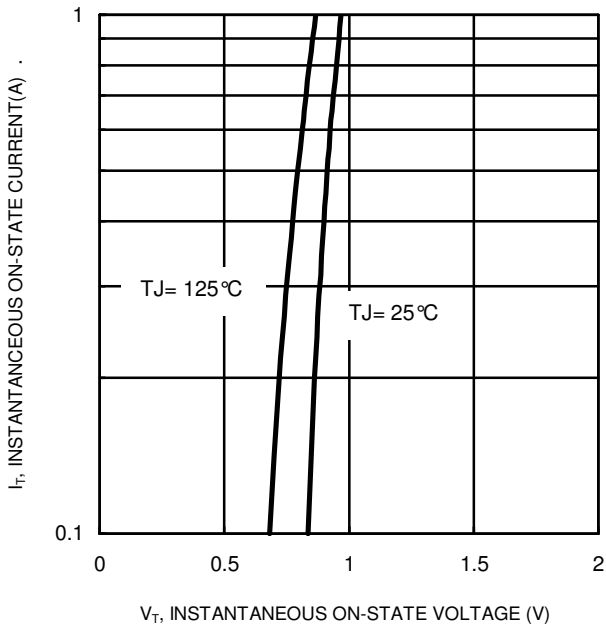


Fig.2- TYPICAL POWER DISSIPATION

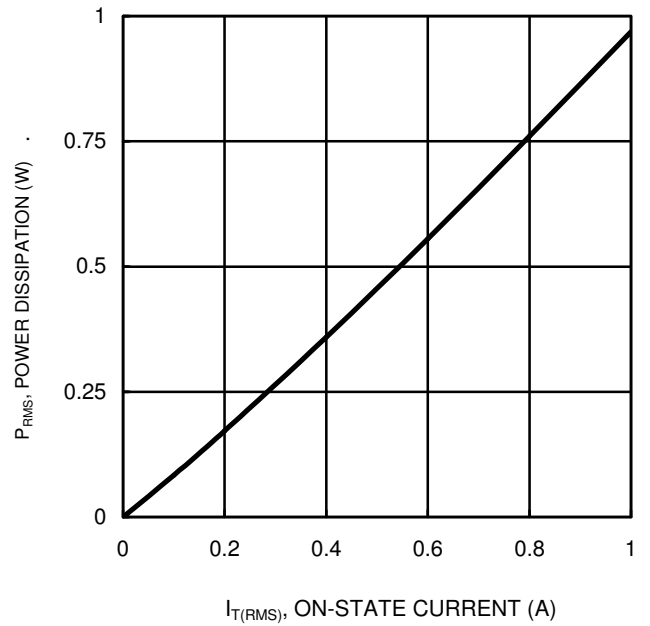


Fig.3- TYPICAL BREAKOVER VOLTAGE

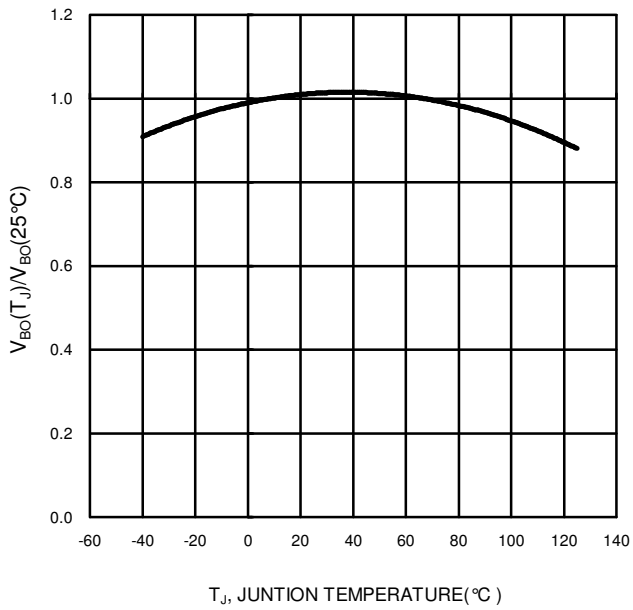
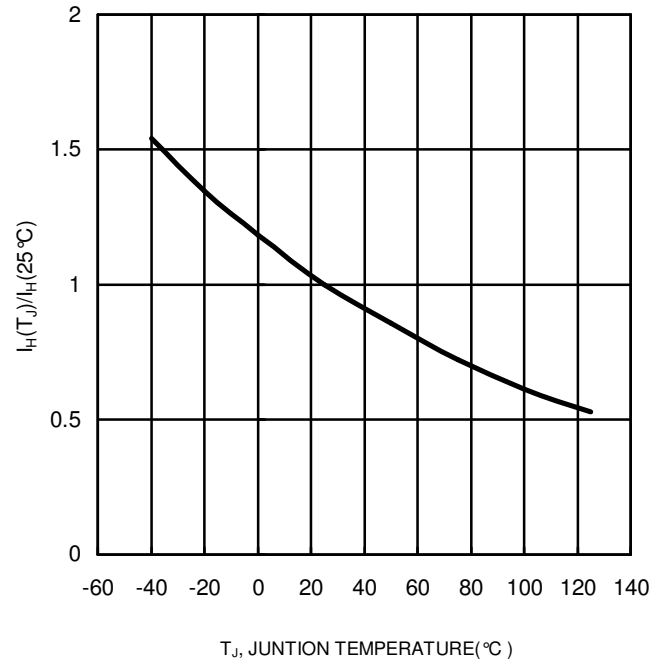


Fig.4- TYPICAL HOLDING CURRENT



LEGAL DISCLAIMER NOTICE

Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.