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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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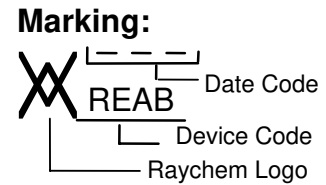
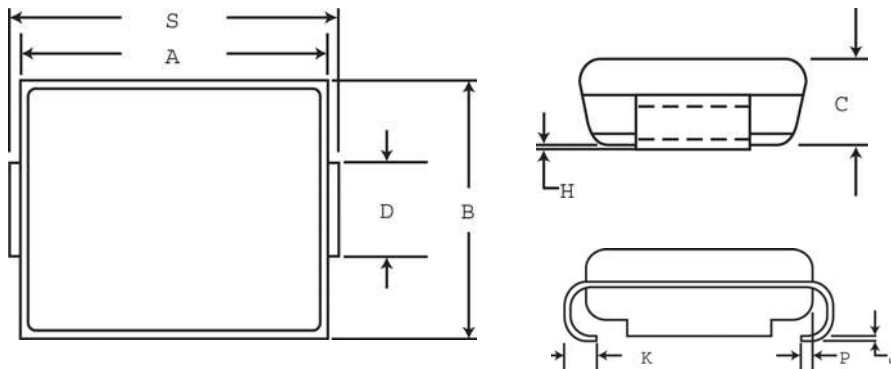
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SiBar™
Thyristor Surge Protectors

Specification Status: Released

PHYSICAL DESCRIPTION



A		B		C		D**		H		J		K		
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
4.06	4.57	2.29	2.92	1.91	2.40	1.27	1.63	0.05	0.15	0.15	0.41	0.76	1.52	
in*:	(0.160)	(0.180)	(0.090)	(0.115)	(0.075)	(0.095)	(0.050)	(0.064)	(0.002)	(0.006)	(0.006)	(0.016)	(0.030)	(0.060)

P		S	
REF	MIN	MAX	
0.51	4.83	5.59	
in*:	(0.020)	(0.190)	(0.220)

*Rounded off approximation
 ** D DIMENSION SHALL BE MEASURED WITHIN DIMENSION

Other Physical Characteristics

Form Factor: SMA (Surface Mount, JEDEC DO-214AC Package)
 Lead Material: Tin/lead finish
 Encapsulation Material: Epoxy, meets UL94 V-0 requirements
 Solderability: per MIL-STD-750, Method 2026
 Solder Heat Withstand: per MIL-STD-750, Method 2031
 Solvent Resistance: per MIL-STD-750, Method 1022
 Mechanical Shock: per MIL-STD-750, Method 2016
 Vibration: per MIL-STD-750, Method 2056

Agency Recognition: UL
 Precedence: This specification takes precedence over documents referenced herein.
 CAUTION: Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

Materials Information

ELV Compliant

Directive 2000/53/EC Compliant

SiBar™
Thyristor Surge Protectors

DEVICE RATINGS @ 25° C (Both Polarities)

Parameter	Symbol	Value	Units
Off-State Voltage, Maximum at $I_D = 5 \mu A$	VDM	270	V
Non-Repetitive Peak Impulse Current	IPP ₁	50	A
Telcordia GR-1089 CORE 10x1000 μs			
Impulse Current	IPP ₂	70	A
TIA-968 lightning Type A Metallic 10/560 μs			
Double exponential Waveform	IPP ₃	100	A
TIA-968 lightning Type A Longit. 10/160 μs			
Telcordia GR-1089 Intrabuilding 2/10 μs	IPP ₄	150	A
(Notes 1 and 2)			
IEC61000-4-5 (Voc 1.2/50us) 8/20 μs	IPP ₅	150	A
ITU-T K.20/K.21 (Voc 10/700us) 5/310 μs	IPP ₆	90	A
TIA-968 lightning Type B (Voc 9/720us) 5/320 μs	IPP ₇	90	A
Critical Rate of Rise of On-State Current			
Powered Pulse Amplifier, C=30uF, V=600V	di/dt	500	A/ μs
Maximum 2x10 μs waveform, V _{OC} =750v, I _{SC} =150A peak	di/dt	110	A/ μs

DEVICE THERMAL RATINGS

Parameter	Symbol	Value	Units
Storage Temperature Range	TSTG	-55 to 150	°C
Operating Temperature Range	TA	-40 to 125	°C
Blocking or conducting state			
Overload Junction Temperature	TJ	+150	°C
Maximum; Conducting state only			
Maximum Lead Temperature for Soldering Purpose; for 10 seconds	TL	+260	°C

ELECTRICAL CHARACTERISTICS Both polarities (T_J @ 25°C unless otherwise noted)

Characteristics	Symbol	Min	Typ	Max	Units
Breakover Voltage (+25°C) (dv/dt = 0.4kV/ μs , I _{sc} =900mA, V _{DC} = 500V (both polarities))	VBO	----	310	365	V
Breakover Voltage Temperature Coefficient	dVBO/dTJ	----	0.1	-----	%/°C
Off-State Current (VD1= 50V)	ID1	----	-----	2.0	μA
(VD2= VDM)	ID2=IDM	----	-----	5.0	μA
On-State Voltage (IT=1A)	VT	----	-----	3.0	V
(PW \leq 300 μs , Duty Cycle \leq 2% (Note 2))					
Breakover Current	IBO	----	----	800	mA
Holding Current (Note 2)	IH	150	----	---	mA
Peak Onstage Surge Current (Measured @ 60Hz, 1 cycle, 600V)	ITSM	22	----	----	A
Critical Rate of Rise of Off-State Voltage (Linear waveform, V _D = 0.8 X Rated V _{BO} , T _J = +25°C)	dv/dt	2000	----	---	V/ μs
Capacitance (f=1.0 MHz, 50Vdc bias, 1 Vrms)	C1	----	22	---	pF
(f=1.0 MHz, 2Vdc bias, 15mVrms)	C2	----	33	---	pF

Note 1. Allow cooling before test second polarity

Note 2. Measured under pulse conditions to reduce heating

VOLTAGE-CURRENT CHARACTERISTIC

