

TECHNICAL DATA
DATA SHEET 5434, REV. A.1

Diode Array

- *Devices are serialized*
- *Eight 1N5615 diodes in surface mount package*
- *Die manufactured on qualified JANS line*
- *Built and screened to space level quality (SDA1006SS)*
- *Quality Conformance Inspection (QCI) in accordance with MIL-PRF-38534 is performed on each lot (SDA1006SS)*
- *Add suffix "S" for screening per MIL-PRF-38534, Class H (SDA1006S)*
- *Add suffix "SS" for Space Level Screening per MIL-PRF-38534, Class K (SDA1006SS)*

MAX. RATINGS / ELECTRICAL CHARACTERISTICS FOR EACH DIODE

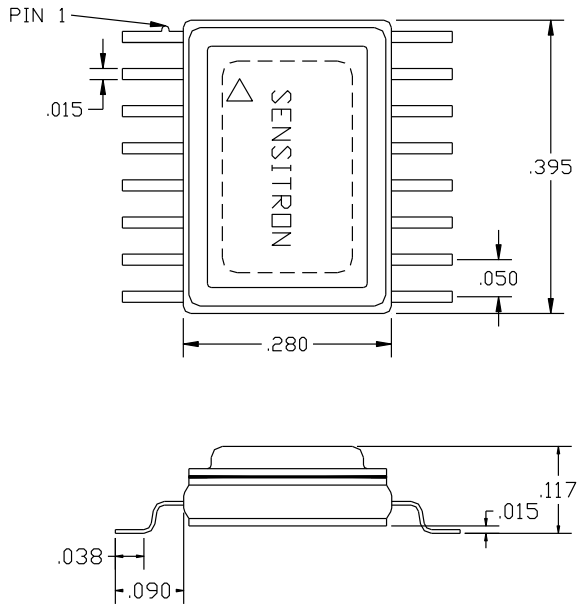
All rating at are $T_A = 25^{\circ}\text{C}$ unless otherwise specified

RATING	SYMBOL	MAX	UNIT
Peak Inverse Voltage (DC)	PIV	200	V
Average DC Output Current Per Diode $T_A = 55^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$	I_O	1 0.75	A
Peak Single Cycle Surge Current ⁽¹⁾ ($T_P=8.3\text{ms}$ single half-Sine wave)	I_{FSM}	10	A
Steady State Power Dissipation per Package ⁽²⁾	P_T	1000	mW
Max. Operating Junction Temperature	T_J	-55 to +150	$^{\circ}\text{C}$
Max. Operating Ambient Temperature	T_{OP}	-30 to 100	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to +175	$^{\circ}\text{C}$
Maximum forward voltage @ 3.0A $T_p = 300\mu\text{s}$; 2% duty cycle	V_f	1.6	V
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$	0.5 25	μA
Max. Reverse Recovery Time $I_F = 0.5\text{ A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$	t_{rr}	150	ns
Max. Capacitance $f = 1\text{MHz}$, $V_R = 12\text{V}$	C_T	45	pF
Thermal Resistance Junction to Case	θ_{JC}	21	$^{\circ}\text{C/W}$

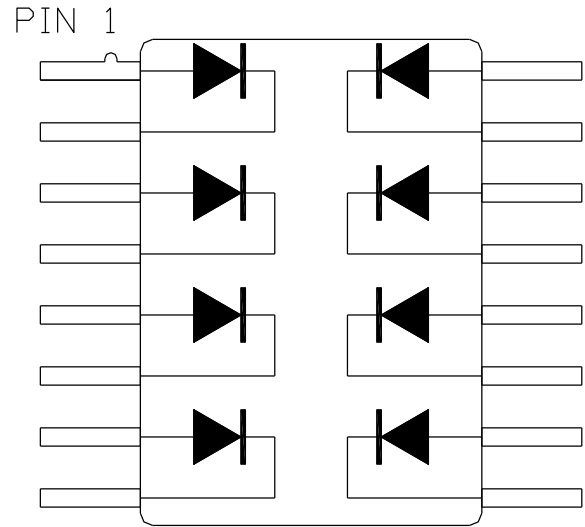
Note: (1) Each diode
(2) Derate at $8\text{mW}/^{\circ}\text{C}$ above 25°C

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Mechanical Outline



Electrical Schematic



PART ORDERING INFORMATION

Part Number	Sensitron Screening Level	Screened In Accordance to:
SDA1006	-	-
SDA1006S	S	MIL-PRF-38534, Class H
SDA1006SS	SS	MIL-PRF-38534, Class K

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