

DIE SPECIFICATION

100V 300mA MONOLITHIC DIODE ARRAY

FEATURES:

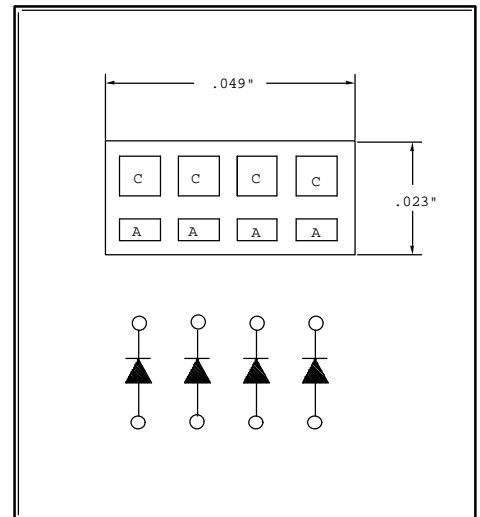
- INDIVIDUAL DIODES EQUIVALENT TO 1N4148
- Vf MATCH TO 5 mV at 10 mA
- ULTRA-HIGH SPEED SWITCHING
- QUAD ISOLATED DIODES

Absolute Maximum Ratings:

Symbol	Parameter	Limit	Unit
VBR(R)	*1 *2 Reverse Breakdown Voltage	100	Vdc
IO	*1 Continuous Forward Current	300	mAdc
IFSM	*1 Peak Surge Current (tp= 1/120 s)	500	mAdc
Top	Operating Junction Temperature Range	-65 to +150	°C
Tstg	Storage Temperature Range	-65 to +200	°C

NOTE 1: Each Diode

NOTE 2: Pulsed: PW = 100ms max.; duty cycle ≤ 20%



Electrical Characteristics (Per Diode) @ 25°C unless otherwise

Symbol	Parameter	Conditions	Min	Max	Unit
BV1	Breakdown Voltage	IR = 100uAdc	100		
BV2	Breakdown Voltage	IR = 5uAdc	75		
Vf1	Forward Voltage	IF = 100mAdc *1		1	Vdc
IR1	Reverse Current	VR = 40 Vdc		0.1	uAdc
IR2	Reverse Current	VR = 20 Vdc		25	nAdc
Ct	Capacitance (pin to pin)	VR = 0 Vdc; f = 1 MHz		4.0	pF
tfr	Forward Recovery Time	IF = 100mAdc		15	ns
trr	Reverse Recovery Time	IF = IR = 10mAdc, irr = 1 mAdc, RL = 100 ohms		5	ns
VF5	Forward Voltage Match	IF = 10 mA		5	mV

NOTE 1: Pulsed: PW = 300us +/- 50us, duty cycle ≤ 2%, 90us after leading edge

Packaging Options:

W: Wafer (100% probed) U: Wafer
(sample probed)
D: Chip (Waffle Pack) B: Chip (Vial)

Processing Options:

Standard: Capable of JANTXV application
(No Suffix)
Suffix C: Commercial

Metallization Options:

Standard: Al Top / Au Backside
(No Dash #)

ORDERING INFORMATION

PART #: 04M0_ _ - _
First Suffix Letter: Packaging Option
Second Suffix Letter: Processing Option
Dash #: Metallization Option

Sertech reserves the right to make changes to any product design, specification or other information at any time without prior notice.