

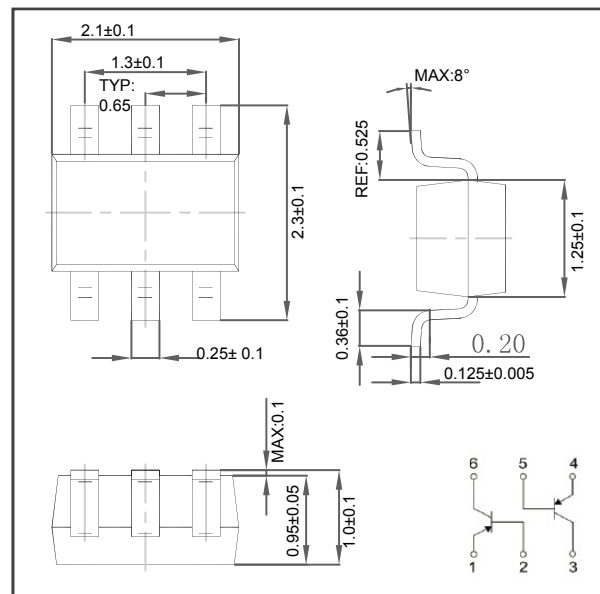
SURFACE MOUNT FAST SWITCHING DIODE ARRAY

FEATURES

- Fast Switching Speed: max. 50ns
- Continuous Reverse Voltage: max. 200V
- Repetitive Peak Reverse Voltage: max. 250V
- Repetitive Peak Forward Current: max. 1A
- Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)
- Qualified to AEC-Q101 Standard for High Reliability

Mechanical Data

- Case: SOT-363
- Case Material: Molded Plastic, "Green" Molding Compound, Note 5. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020



Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	250	V
Peak Repetitive Reverse Voltage	V _{RRM}	250	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	177	V
Forward Continuous Current (Note 5)	I _{FM}	200	mA
Non-Repetitive Peak Forward Surge Current	I _{FSM}	10	A
@ t = 50μs		8	
@ t = 10ms		2	

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P _D	300	mW
Thermal Resistance Junction to Ambient Air (Note 5)	R _{θJA}	417	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	V _{(BR)R}	250	—	V	I _R = 100μA
Forward Voltage	V _F	—	1.05 1.25	V	I _F = 100mA I _F = 200mA
Reverse Current (Note 6)	I _R	—	100 100	nA μA	V _R = 200V V _R = 200V, T _J = +150°C
Total Capacitance	C _T	—	5	pF	V _R = 6, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	50	n	V _R = 6V, I _F = 5mA

Notes: 5. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.
6. Short duration pulse test used to minimize self-heating effect.

RATINGS AND CHARACTERISTIC CURVES

