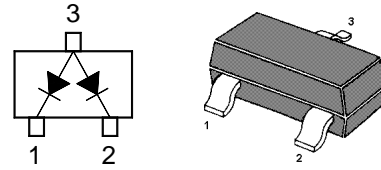


Silicon Epitaxial Planar Switching Diode
Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance



Marking Code: **A1**
SOT-23 Plastic Package

Applications

- Ultra high speed switching application

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Continuous Reverse Voltage	V_R	75	V
Forward Current (DC)	I_F	215	mA
Single Diode Loaded Double Diode Loaded		125	
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5	A
at $t = 1\text{ s}$		1	
at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$		4	
Power Dissipation	P_{tot}	350	mW
Operating Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage	V_F	715	mV
at $I_F = 1\text{ mA}$		855	mV
at $I_F = 10\text{ mA}$		1	V
at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$		1.25	V
Reverse Current	I_R	30	nA
at $V_R = 25\text{ V}$		1	μA
at $V_R = 75\text{ V}$		30	μA
at $V_R = 25\text{ V}, T_J = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}, T_J = 150\text{ }^\circ\text{C}$		50	μA
Diode Capacitance	C_d	2	pF
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = I_R = 10\text{ mA}, R_L = 100\text{ }\Omega$			

