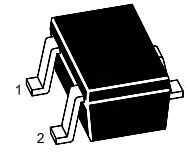
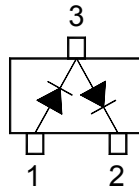


**HIGH-SPEED DOUBLE SWITCHING DIODE**


SOT-323 Plastic Package

 Marking Code: **A7**
**Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )**

Parameter	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	$V_{RRM}$	85	V	
Continuous Reverse Voltage	$V_R$	75	V	
Continuous Forward Current	$I_F$	Single Diode Load <sup>1)</sup>	150	mA
		Double Diode Load <sup>1)</sup>	130	
Repetitive Peak Forward Current	$I_{FRM}$	500	mA	
Non-repetitive Peak Forward Current	$I_{FSM}$	at $t = 1\ \mu\text{s}$	4	A
Square Wave; $T_j = 25\text{ }^\circ\text{C}$ Prior to Surge		at $t = 1\ \text{ms}$	1	
		at $t = 1\ \text{s}$	0.5	
Total Power Dissipation	$P_{tot}$	200	mW	
Junction Temperature	$T_j$	150	$^\circ\text{C}$	
Storage Temperature Range	$T_{stg}$	-65 to +150	$^\circ\text{C}$	
Thermal Resistance from Junction to Ambient <sup>1)</sup>	$R_{th\ j-a}$	625	K/W	

<sup>1)</sup> Device mounted on an FR4 printed-circuit board.

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

Parameter	Symbol	Max.	Unit	
Forward Voltage	$V_F$	at $I_F = 1\ \text{mA}$	0.715	V
		at $I_F = 10\ \text{mA}$	0.855	
		at $I_F = 50\ \text{mA}$	1	
		at $I_F = 150\ \text{mA}$	1.25	
Reverse Current	$I_R$	at $V_R = 25\ \text{V}$	30	nA
		at $V_R = 75\ \text{V}$	1	$\mu\text{A}$
		at $V_R = 25\ \text{V}$ , $T_j = 150\text{ }^\circ\text{C}$	30	$\mu\text{A}$
		at $V_R = 75\ \text{V}$ , $T_j = 150\text{ }^\circ\text{C}$	50	$\mu\text{A}$
Diode Capacitance	$C_d$	1.5	pF	
Reverse Recovery Time	$t_{rr}$	4	ns	
Forward Recovery Voltage	$V_{fr}$	1.75	V	
		at $I_F = 10\ \text{mA}$ , $t_r = 20\ \text{ns}$		

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