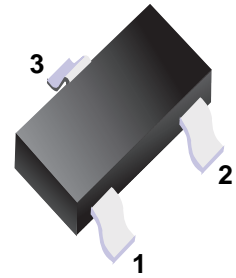


**Dual Surface Mount Switching Diode**

**■ Simplified outline(SOT-323)**
**■ Features**

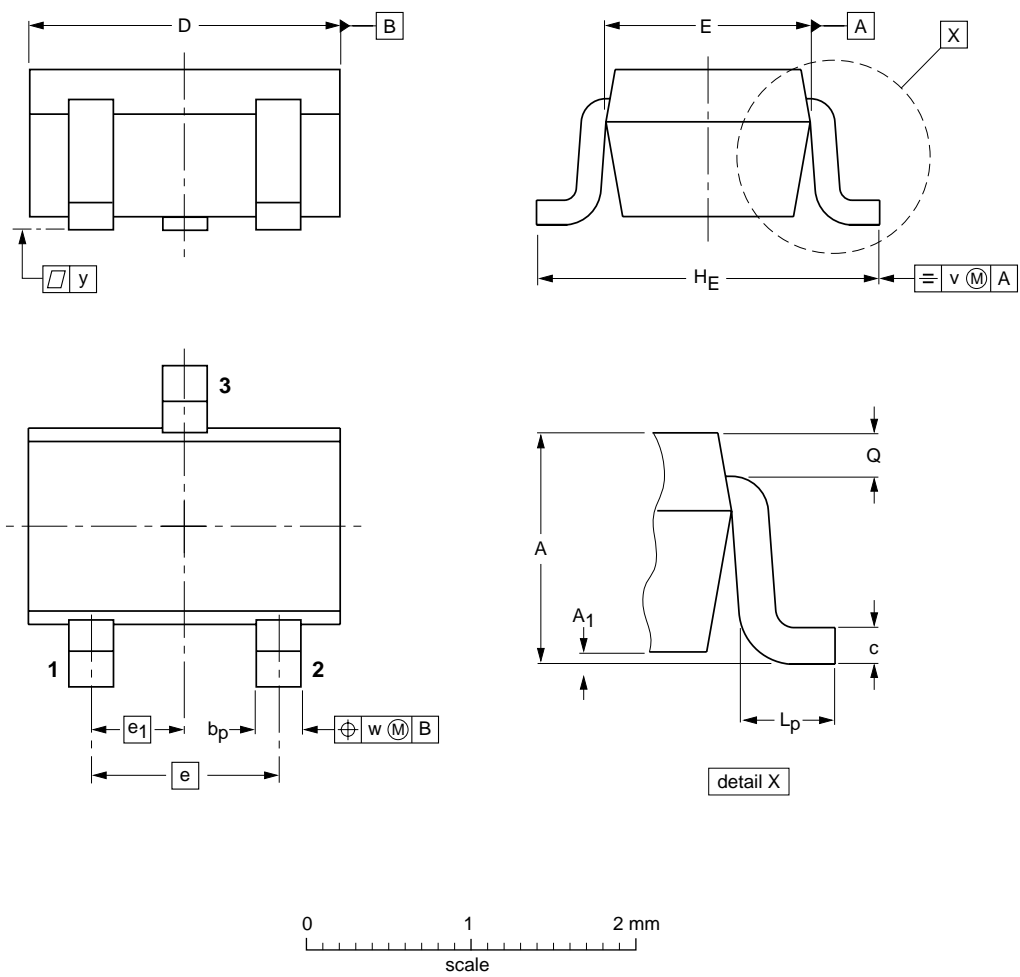
- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance

**■ Absolute Maximum Ratings Ta = 25°C**

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	$I_o$	150	mA
Forward Continuous Current	$I_{FM}$	300	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 $\mu$ s	$I_{FSM}$	2.0	A
@ t = 1.0s		1.0	
Power Dissipation	$P_d$	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	$T, T_{STG}$	-65 to +150	°C

**■ Electrical Characteristics Ta = 25°C**

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_F = 2.5 \mu A$	75			V
Forward Voltage	$V_F$	$I_F = 1.0mA$			0.715	V
		$I_F = 10mA$			0.855	
		$I_F = 50mA$			1.0	
		$I_F = 150mA$			1.25	
Peak Reverse Current	$I_{RM}$	$V_R = 75V$			2.5	$\mu A$
		$V_R = 75V, T_j = 150^\circ C$			50	$\mu A$
		$V_R = 25V, T_j = 150^\circ C$			30	$\mu A$
		$V_R = 20V$			25	nA
Junction Capacitance	$C_j$	$V_R = 0, f = 1.0MHz$			2	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$			4	ns

**■ SOT-323**

**DIMENSIONS (mm are the original dimensions)**

UNIT	A	A <sub>1</sub> max	b <sub>p</sub>	c	D	E	e	e <sub>1</sub>	H <sub>E</sub>	L <sub>p</sub>	Q	v	w
mm	1.1 0.8	0.1	0.4 0.3	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.23 0.13	0.2	0.2