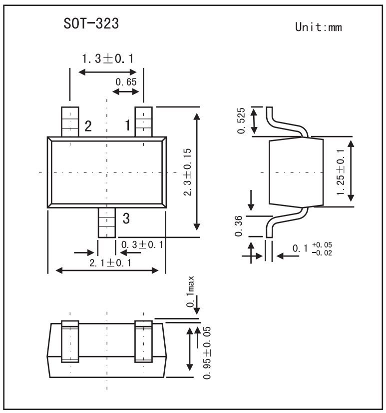
HIGH SPEED SWITCHING SILICON EPITAXIAL DOUBLE DIODE

1SS303



■ Features

- ● Low capacitance: Ct = 2.5 pF TYP.
- ● High speed switching: trr = 4.0 ns MAX.
- ● Wide applications including switching, limitter, clipper.
- ● Double diode configuration assures economical use.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	V_{RM}	75	V
DC Reverse Voltage	V_R	50	V
Surge Current (1 μ s) Note 1	I_{FSM}	6.0	A
Surge Current (1 μ s)	I_{FSM}	4.0	A
Peak Forward Current Note 1	I_{FM}	450	mA
Peak Forward Current	I_{FM}	300	mA
Average Rectified Current (Note 1)	I_O	150	mA
Average Rectified Current	I_O	100	mA
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 to +150	℃
Junction to Ambient (Note 1)	$R_{th(j-a)}$	1.0	℃/mW
Junction to Ambient	$R_{th(j-a)}$	0.85	℃/mW

Note

1.Both diodes loaded simultaneously.

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F(1)}$	I_F = 1 mA		0.72	1.0	V
	$V_{F(2)}$	I_F = 50 mA		0.88	1.1	
	$V_{F(3)}$	I_F = 100 mA		1.0	1.2	
Reverse current	$I_{R(1)}$	V_R = 50 V			0.1	μA
Capacitance	C_t	V_R = 0, f = 1.0 MHz		2.5	4.0	pF
Reverse recovery time	t_{rr}				4.0	ns

■ Marking

Marking	A4