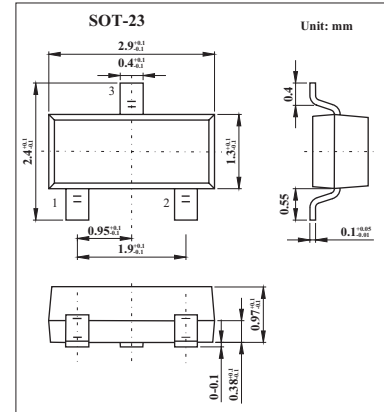
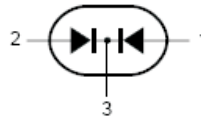


High-Speed Double Diode

1PS184

■ Features

- Small plastic SMD package
- High switching speed: max. 4 ns
- Continuous reverse voltage: max. 80 V
- Repetitive peak reverse voltage: max. 85 V
- Repetitive peak forward current: max. 500 mA.



■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V _{RRM}	85	V
Continuous reverse voltage	V _R	80	V
Continuous forward current (single diode loaded *) (double diode loaded *)	I _F	215 125	mA
Repetitive peak forward current	I _{FRM}	500	mA
Non-repetitive peak forward current T _j =25 °C t=1 μs t=1s	I _{FSM}	4 0.5	A
power dissipation *	P _D	250	mW
Thermal resistance from junction to tie-point	R _{th j-tp}	250	K/W
Thermal resistance from junction to ambient *	R _{th j-a}	500	K/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-65 to +150	°C

* Device mounted on an FR4 printed-circuit board.

■ Electrical Characteristics Ta = 25 °C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Forward voltage	V _F	I _F = 1 mA		610		mV
		I _F = 10 mA		740		mV
		I _F = 50 mA			1.0	V
		I _F = 100 mA			1.2	V
Reverse current	I _R	V _R = 25 V			30	nA
		V _R = 80 V			0.5	μA
		V _R = 25 V; T _j = 150 °C			30	μA
		V _R = 80V; T _j = 150 °C			100	μA
Diode capacitance	C _d	V _R = 0 V, f = 1 MHz			1.5	pF
Reverse recovery time	t _{rr}	when switched from I _F = 10 mA to I _R = 10 mA; R _L = 100 Ω; measured at I _R = 1 mA			4	nS
Forward recovery voltage	V _{fr}	I _F = 10 mA, t _r = 20 ns			1.75	V

■ Marking

Marking	B3T