

SMD Type

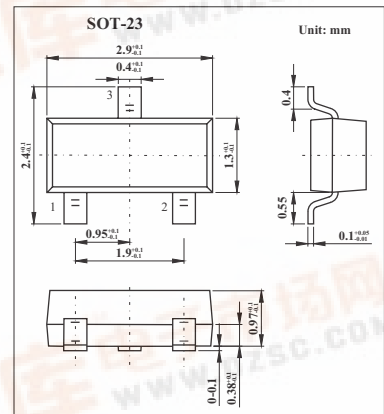
Diodes

High Conductance Ultra Fast Diode

MMBD1201;MMBD1203

MMBD1204;MMBD1205

■ Features



■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Value	Unit
Working Inverse Voltage	W _{IV}	50	V
Average Rectified Current	I _O	200	m A
DC Forward Current	I _F	600	m A
Recurrent Peak Forward Current	i _f	700	m A
Peak Forward Surge Current	i _{f(surge)}	1.0	A
Pulse width = 1.0 second		2.0	A
Pulse width = 1.0 microsecond			
Storage Temperature Range	T _{stg}	-55 to + 150	°C
Operating Junction Temperature	T _J	150	°C
Total Device Dissipation	P _D	350	m W
Derate above 25 °C		2.8	m W / °C
Thermal Resistance, Junction to Ambient	R _{θJA}	357	°C / W

MMBD1201;MMBD1203 MMBD1204;MMBD1205

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

Parameter	Symbol	Conditions	Min	Max	Unit
Breakdown voltage	B_V	$I_R = 100 \mu\text{A}$	100		V
Reverse current	I_R	$I_F = 20 \text{ V}$		25	nA
		$I_F = 50 \text{ V}$		50	nA
		$I_F = 50 \text{ V}, T_A = 150^\circ\text{C}$		5	μA
Forward voltage	V_F	$I_F = 1.0 \text{ mA}$	550	600	mV
		$I_F = 10 \text{ mA}$	660	740	mV
		$I_F = 100 \text{ mA}$	820	920	mV
		$I_F = 200 \text{ mA}$	0.87	1.0	V
		$I_F = 300 \text{ mA}$		1.1	V
Diode capacitance	C_D	$V_R = 0, f = 1.0 \text{ MHz}$		2.0	pF
Reverse recovery time	T_{RR}	$I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA}, R_L = 100 \Omega$		4.0	ns

■ Marking

Type	MMBD1201	MMBD1203	MMBD1204	MMBD1205
Marking	24	26	27	28