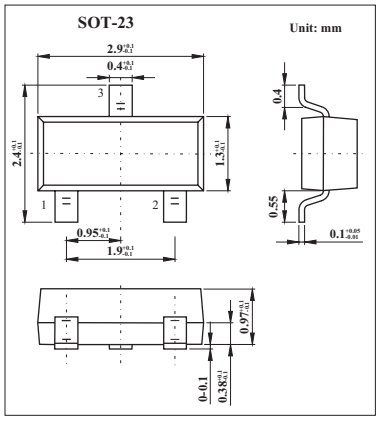
High Conductance Low Leakage Diode

MMBD1701/A,MMBD1703/A
MMBD1704/A,MMBD1705/A



■ Features

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Value	Unit
Working Inverse voltage	W_{IV}	20	V
Average rectified current	I_O	50	mA
DC forward current	I_F	150	mA
recurrent peak forward current	i_f	150	mA
Peak forward surge current pulse width = 1.0 second	i_f	250	mA
Storage temperature range	T_{stg}	-55 to + 150	℃
Operating junction temperature	T_J	150	℃
Total device dissipation Derate above 25 ℃	P_D	350 2.8	mW mW/℃
Thermal resistance, Junction to ambient	$R_{\theta JA}$	357	℃/W

MMBD1701/A /1703/A-1705/A*

* Device mounted on glass epoxy 1.6" × 1.6" × 0.06", mounting pad for collector lead min. 0.93in2.

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Conditions	Min	Max	Unit
Breakdown voltage	B_V	I_R = 5.0 μA	30		V
Reverse current	I_R	I_F = 20 V		50	nA
Forward voltage	V_F	I_F = 10 μA	420	500	mV
		I_F = 100 μA	520	610	mV
		I_F = 1.0 mA	640	740	mV
		I_F = 10 mA	760	880	mV
		I_F = 20 mA	810	950	mV
		I_F = 50 mA	0.89	1.1	V
Diode capacitance	C_D	V_R = 0, f = 1.0 MHz		1.0	pF
Reverse Recovery time	T_{RR}				
MMBD1701-1705		I_F = I_R = 10 mA,I_{RR} = 1.0 mA, R_L = 100 Ω		700	ps
MMBD1701A-1705A		I_F = I_R = 10 mA,I_{RR} = 1.0 mA, R_L = 101 Ω		1.0	ns

■ Marking

Type	MMBD1701/A	MMBD1703/A	MMBD1704/A	MMBD1705/A
Marking	85/85A	87/87A	88/88A	89/89A