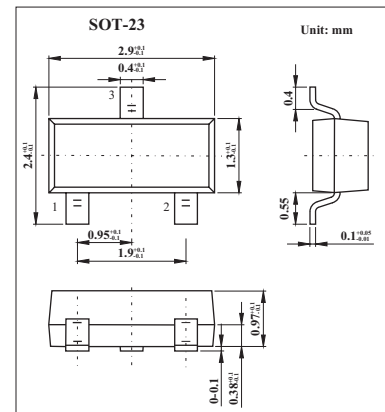


## High Conductance Low Leakage Diode

MMBD1701/A,MMBD1703/A

MMBD1704/A,MMBD1705/A

## ■ Features



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Value	Unit
Working Inverse voltage	WIV	20	V
Average rectified current	Io	50	mA
DC forward current	IF	150	mA
recurrent peak forward current	if	150	mA
Peak forward surge current pulse width = 1.0 second	if	250	mA
Storage temperature range	Tstg	-55 to + 150	°C
Operating junction temperature	TJ	150	°C
Total device dissipation	PD	350	mW
Derate above 25 °C		2.8	mW/°C
Thermal resistance, Junction to ambient	RθJA	357	°C/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.

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

### ■ Electrical Characteristics Ta = 25 °C

Parameter	Symbol	Conditions	Min	Max	Unit
Breakdown voltage	BV	$I_R = 5.0 \mu A$	30		V
Reverse current	$I_R$	$I_F = 20 V$		50	nA
Forward voltage	$V_F$	$I_F = 10 \mu A$	420	500	mV
		$I_F = 100 \mu A$	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	$T_{RR}$	$I_F = I_R = 10 mA, I_{RR} = 1.0 mA, R_L = 100 \Omega$ $I_F = I_R = 10 mA, I_{RR} = 1.0 mA, R_L = 101 \Omega$		700	ps
MMBD1701-1705 MMBD1701A-1705A				1.0	ns

### ■ Marking

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