MMBV105G

CASE 318-02/03, STYLE 8
SOT-23 (TO-236AA/AB)

VOLTAGE VARIABLE CAPACITANCE DIODE

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MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	30	Vdc
Forward Current	I_F	200	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
*Total Device Dissipation, T_A = 25°C Derate above 25°C	P_D	350 2.8	mW mW/°C
Storage Temperature	T_{stg}	150	°C
*Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W

*Package mounted on 99.5% alumina 10 x 8 x 0.6 mm.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Reverse Breakdown Voltage (I_R = 10 μAdc)	$V_{(BR)}$	30	—	—	Vdc
Reverse Voltage Leakage Current (V_R = 28 Vdc)	I_R	—	—	50	nAdc
Series Inductance (f = 250 MHz)	L_S	—	3.0	—	nH
Diode Capacitance Temperature Coefficient (V_R = 3.0 Vdc, f = 1.0 MHz)	T_{CC}	—	280	—	ppm/°C
Diode Capacitance (V_R = 25 Vdc)	C_T	1.8	—	2.8	pF
Capacitance (V_{R1} = 3.0 Vdc, V_{R2} = 25 Vdc, f = 1.0 MHz)	C3/C25	4.0	—	6.0	pF