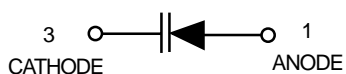


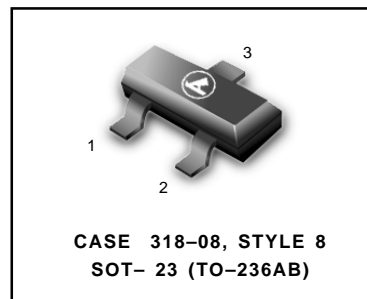
Silicon Tuning Diode

This device is designed in the surface Mount package for general frequency control and tuning applications. It provides solid-state reliability in replacement of mechanical tuning methods.

- Controlled and Uniform Tuning Ratio



MMBV105GLT1



MAXIMUM RATINGS(EACH DIODE)

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	30	Vdc
Forward Current	I_F	200	mAdc
Device Dissipation @ $T_A = 25^\circ\text{C}$	P_D	225	mW
Derate above 25°C		1.8	mW/ $^\circ\text{C}$
Junction Temperature	T_J	+125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

DEVICE MARKING

MMBV105GLT1=M4E

ELECTRICAL CHARACTERISTICS($T_A=25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ($I_R=10\mu\text{Adc}$)	$V_{(BR)R}$	30	—	Vdc
Reverse Voltage Leakage Current ($V_R=28\text{Vdc}$)	I_R	—	50	nAdc

Device Type	C_T $V_R=25\text{Vdc}, f=1.0\text{MHz}$ pF		Q $V_R=3.0\text{Vdc}$ $f=50\text{MHz}$	C_R C_3/C_{25} $f=1.0\text{MHz}$	
	Min	Max	Typ	Min	Max
MMBV105GLT1	1.5	2.8	250	4.0	6.5

MMBV105GLT1

TYPICAL CHARACTERISTICS

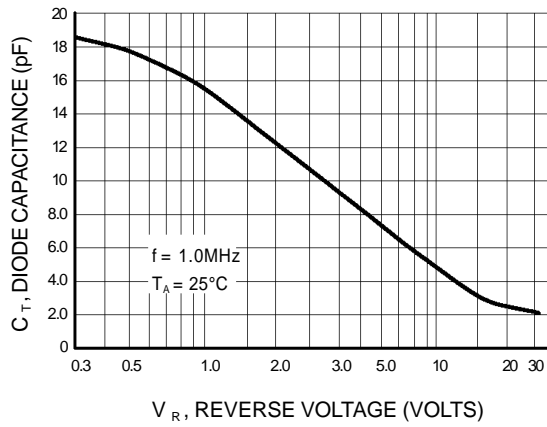


Figure 1. Diode Capacitance

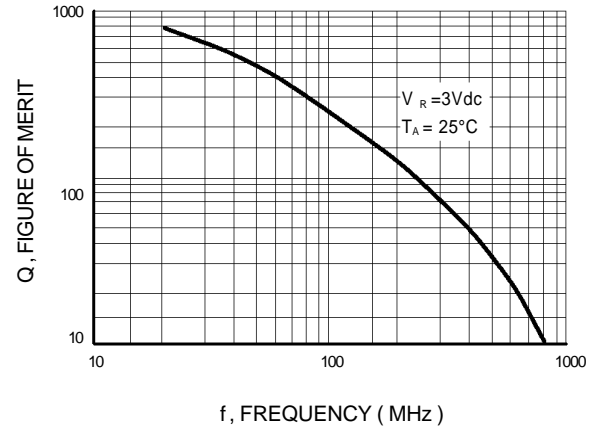


Figure 2. Figure of Merit

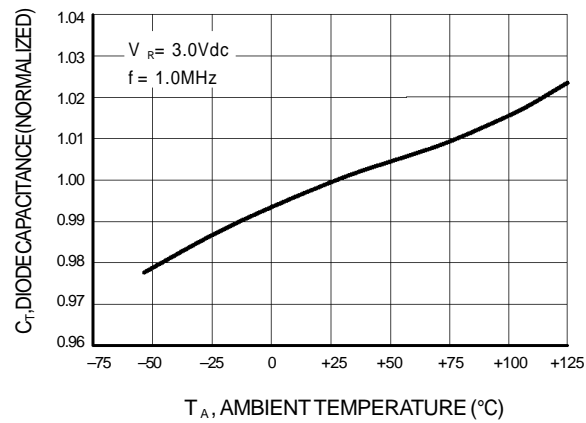


Figure 3. Diode Capacitance