

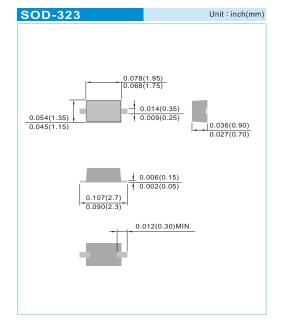


### SURFACE MOUNT PIN DIODE

VOLTAGE 200 Volts POWER 200 mW

#### **FEATURES**

- High reverse breakdown voltage (200V min)
- Very low series resistance at 100MHz (0.7 $\Omega$  typical@ I<sub>F</sub>=10mA)
- Long minority carrier lifetime (Trr=300ns typical)
- Low capacitance (0.5 pF typical @V<sub>R</sub>=20V)
- Surface mount package ideally suited for autmatic insertion
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

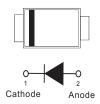


#### **MECHANICAL DATA**

Case: SOD-323, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0041 gram



### **ABSOLUTE RATINGS**

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Reverse Voltage	$V_R$	200	V
Continuous Forward Current	l <sub>F</sub>	0.2	А

#### THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation (1)	P <sub>TOT</sub>	200	mW
Thermal Resistance, Junction to Ambient (1)	$R_{\scriptscriptstyle{\ThetaJA}}$	625	°C/W
Junction Temperature	T <sub>J</sub>	-55 to 150	°C
Storage Temperature	T <sub>stg</sub>	-55 to 150	°C

Note 1. FR-5 Board=1.0x0.75x0.062 in.

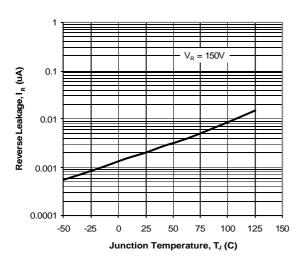




## ELECTRICAL CHARACTERISTICS (T\_=25°C, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage	V <sub>(BR)</sub> I <sub>R</sub> =10μA		200	-	-	V
Reverse Current	I <sub>R</sub> V <sub>R</sub> =150V		-	-	100	nA
Series Resistance	R <sub>s</sub>	I <sub>F</sub> =10mA,f=100MHz	-	0.7	1.0	Ω
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> =20V,f=1MHz	-	0.7	1.0	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA	-	300	-	ns

## **CHARACTERISTIC CURVES**



1000 T<sub>J</sub> = 125 °C T<sub>J</sub> = 75 °C T<sub>J</sub> = 55 °C

Figure 1. Leakage Current

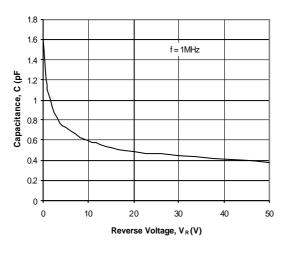


Figure 2. Forward Voltage

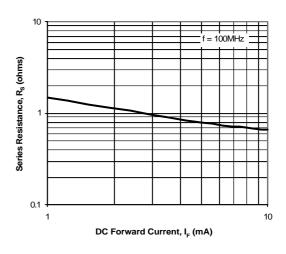


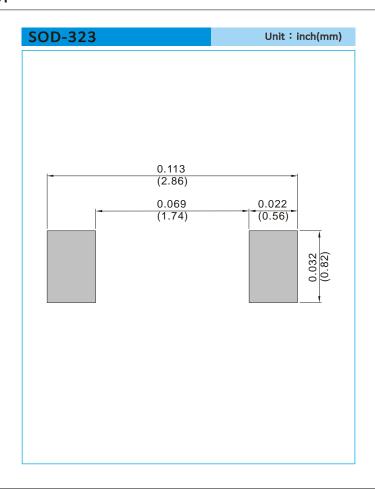
Figure 3. Capacitance

Figure 4. Series Resistance





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

· Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel





## Part No\_packing code\_Version

MMVL3700\_R1\_00001 MMVL3700\_R2\_00001

# For example :



Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			





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