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## 100V/100mA SURFACE MOUNT SWITCHING DIODE



#### Features:

- Designed for mounting on small surface
- High speed switching
- High mounting capability, strong surge withstand, high reliability

#### **Mechanical data:**

- Case: 0805(2012) Standard package, molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band
- Mounting position: Any
- Weight: 4.8mg (approximately)

### Absolute Maximum Ratings(Ta=25°C)

Characteristics	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	Vrrm	110	V	
Reverse Voltage	VR	100	V	
Average Forward Current @ 8.3ms single half sinewave superimposed on rated load(JEDEC method)	Іо	100	mA	
Peak Forward Surge Current @ single sinewave, 60Hz	IFSM	1.0	А	
Power Dissipation	Pd	300	mW	
Junction Temperature	Tj	-55 to +125	°C	
Storage Temperature Range	Tstg	-55 to +125	°C	

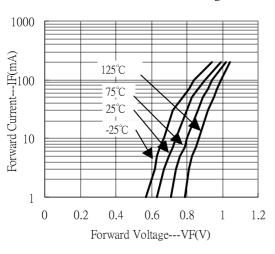
### **Electrical Characteristics** (Tj=25°C)

Characteristics	Symbol	Min	Тур	Max	Unit
Forward Voltage at I <sub>F</sub> =100mA	V <sub>F</sub>	-	-	1	V
Reverse Leakage Current at $V_R$ =100V	IR	-	-	100	nA
Diode Capacitance at $V_R = 1V$	CD	-	-	3	pF
Reverse Recovery Time From $I_F=-I_R=10mA$ to $I_{RR}=-1mA$ , $V_R=6V$ , $R_L=50\Omega$	t <sub>rr</sub>	-	-	4	ns



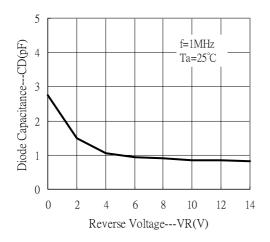
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### **Characteristic Curves**



Forward Current vs Forward Voltage

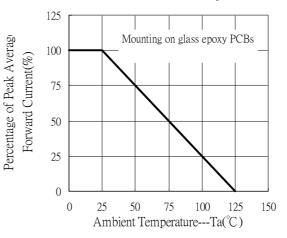
Diode Capacitance vs Reverse Voltage



10000 Reverse Leakage Current---IR(nA) 125°C 1000 75°C 100 25°C 10 1 0 10 20 30 40 50 70 80 60 Ambient Temperature---TA(°C)

Reverse Leakage Current vs Temperature

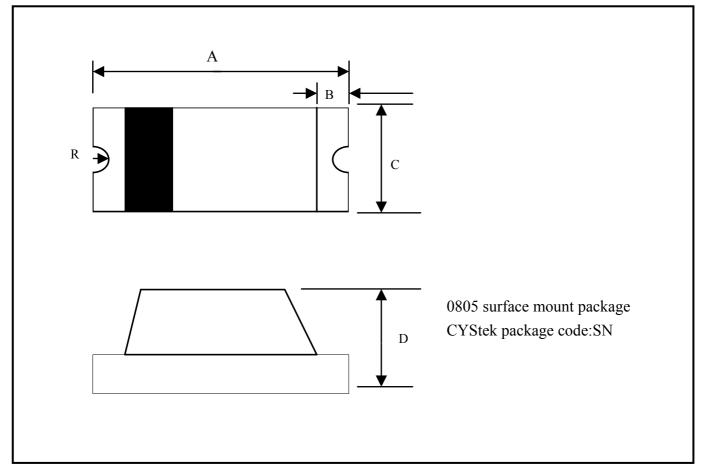
Forward Current vs Ambient Temperature





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# 0805(2012) Dimension



									*:Typical
DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
А	0.079	0.087	2.00	2.20	С	0.047	0.055	1.20	1.40
В	0.016(typ.)		0.40(typ.)		D	0.035	0.043	0.90	1.10
R	0.008	(tup.)	0.20(typ.)						
2	.Controlling din 2.Maximum lead 3.If there is any	d thickness incl	udes lead finisl	,					ase material.

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