



75V/150mA SURFACE MOUNT SWITCHING DIODE

# CDSS355CY

**Features:**

- Designed for mounting on small surface
- Extremely thin / leadless package
- High mounting capability, strong surge withstand, high reliability

**Mechanical data:**

- Case: 0603(1608) standard package, molded plastic, JEDEC SOD-523
- Terminals : Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band
- Mounting position: Any
- Weight: 0.003 gram (approximately)

**Absolute Maximum Ratings**(At Ta=25°C, unless otherwise noted)

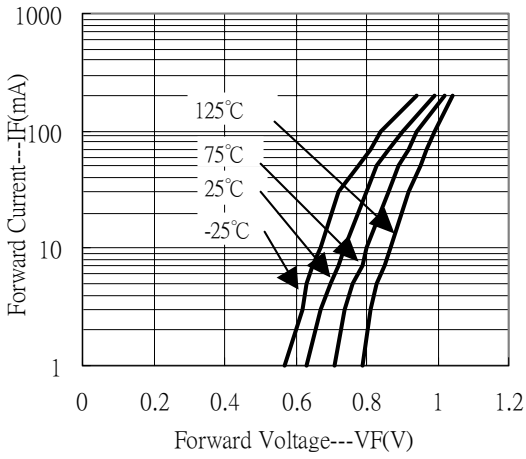
Characteristics	Symbol	Min	Typ	Max	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	-	-	100	V
Reverse Voltage	V <sub>R</sub>	-	-	75	V
Average Forward Current	I <sub>O</sub>	-	-	150	mA
Peak Forward Surge Current @ tp=1μs @ tp=1ms	I <sub>FSM</sub>	-	4 1	-	A
Repetitive Peak Forward Current	I <sub>FRM</sub>	-	-	300	mA
Power Dissipation	P <sub>D</sub>	-	-	150	mW
Junction Temperature	T <sub>j</sub>	-40	-	+125	°C
Storage Temperature Range	T <sub>stg</sub>	-40	-	+125	°C

**Electrical Characteristics** ( At Ta=25°C, unless otherwise noted)

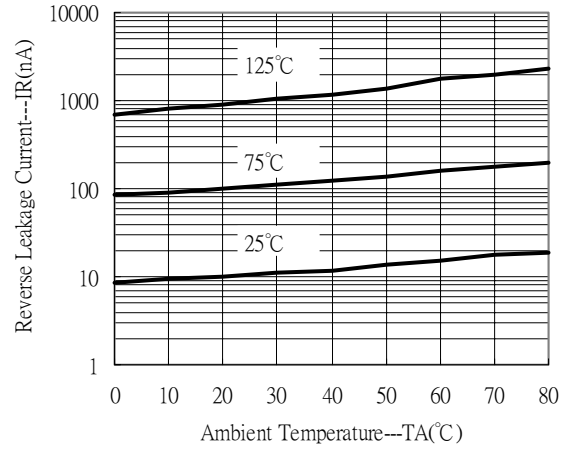
Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	I <sub>F</sub> =50mA	V <sub>F</sub>	-	-	1	V
Reverse Current	V <sub>R</sub> =20V V <sub>R</sub> =75V	I <sub>R</sub>	-	-	25 2.5	nA μA
Diode Capacitance	V <sub>R</sub> =0V, f=1MHz	C <sub>D</sub>	-	-	4	pF
Reverse Recovery Time	I <sub>F</sub> =I <sub>R</sub> =10mA, R <sub>L</sub> =100Ω, I <sub>rr</sub> =1mA	t <sub>rr</sub>	-	-	4	ns

**Characteristic Curves**

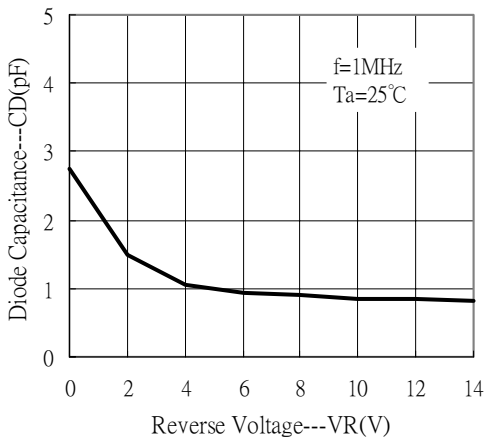
Forward Current vs Forward Voltage



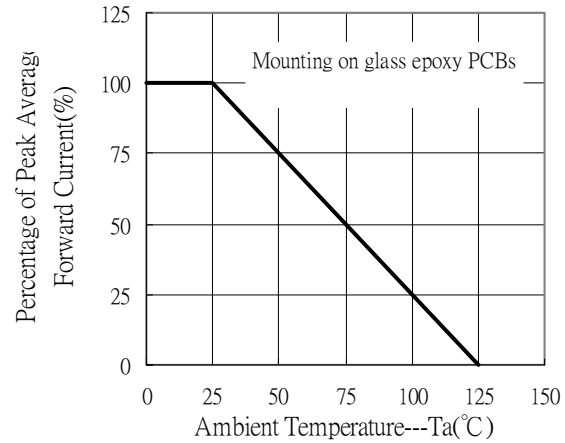
Reverse Leakage Current vs Temperature



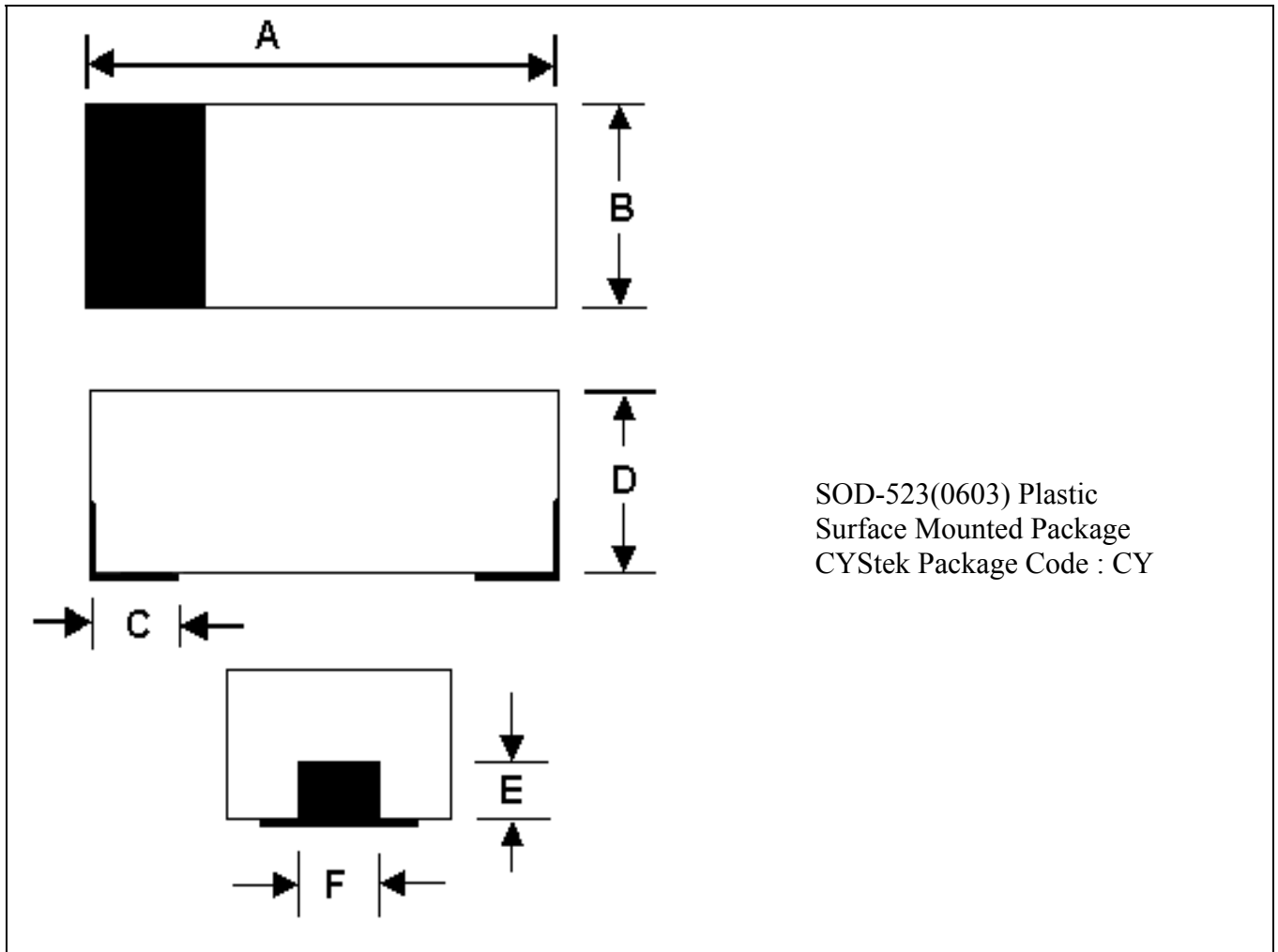
Diode Capacitance vs Reverse Voltage



Forward Current vs Ambient Temperature



**SOD-523(0603) Dimension**



\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.063	0.071	1.6	1.8	D	0.027	0.033	0.70	0.85
B	0.031	0.039	0.8	1.0	E	0.012(typ)		0.30(typ)	
C	0.010(typ)		0.25(typ)		F	0.014(typ)		0.35(typ)	

Notes : 1.Controlling dimension : millimeters.  
 2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

**Material :**

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

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