

## DESCRIPTION

The SYSDxxC Series is designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. These devices are ideal for situations where board space is at a premium.

This series has been specifically designed to protect sensitive components which are connected to power, data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE (Cable Discharge Events), and EFT (electrical fast transients).

## FEATURES

- ✧ IEC61000-4-2 (ESD)  $\pm 30\text{kV}$  (Contact)  
 $\pm 30\text{kV}$  (Air)
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns)
- ✧ 350 Watts Peak Pulse Power per (tp=8/20 $\mu\text{s}$ )
- ✧ Protects one I/O line (bidirectional)
- ✧ Low clamping voltage
- ✧ Working voltages:  
3V, 5V, 8V, 12V, 15V, 18V, 20V, 24V, 36V
- ✧ Low leakage current

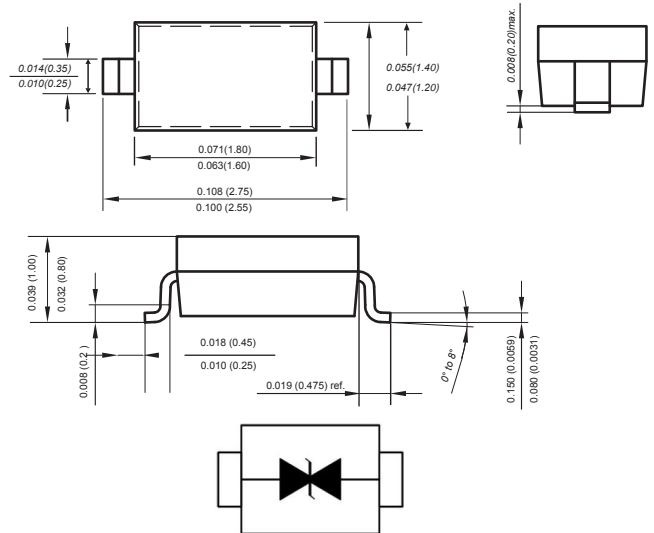
## APPLICATIONS

- ✧ Cell Phone Handsets and Accessories
- ✧ Microprocessor based equipment
- ✧ Personal Digital Assistants (PDA's)
- ✧ Notebooks, Desktops, and Servers
- ✧ Portable Instrumentation
- ✧ Networking and Telecom
- ✧ Serial and Parallel Ports.
- ✧ Peripherals

**SOD-323**

**RoHS**  
COMPLIANT

**Pb**  
Pb-Free



Dimensions in inches and (millimeters)

## MACHANICAL DATA

- ✧ SOD-323 package
- ✧ Flammability Rating: UL 94V-0
- ✧ Packaging: Tape and Reel
- ✧ High temperature soldering guaranteed:  
260°C/10s
- ✧ Reel size: 7 inch
- ✧ MSL 1



## SYSDxxC Series Bidirectional TVS Diodes

ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
$V_{ESD}$	ESD per IEC 61000-4-2 (Contact)	$\pm 30$	kV
	ESD per IEC 61000-4-2 (Air)	$\pm 30$	
$P_{PP}$	Peak Pulse Power (8/20 $\mu$ s)	350	W
$T_{OPT}$	Operating Temperature	-55/+150	$^{\circ}$ C
$T_{STG}$	Storage Temperature	-55/+150	$^{\circ}$ C
$T_L$	Lead Soldering Temperature	260 (10 sec.)	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}$ C)									
PART NUMBER	DEVICE MARKING	$V_{RWM}$ (V) (max.)	$V_B$ (V) (min.)	$I_T$ (mA)	$V_C@1A$ (V) (max.)	$V_C$ (V) (max.) (@A)		$I_R$ ( $\mu$ A) (max.)	$C_T$ (pF) (max.)
SYSD03C	2A	3.3	4.0	1	7.5	16.0	20	40	450
SYSD05C	2B	5.0	6.0	1	9.8	18.0	17	10	200
SYSD08C	2C	8.0	8.5	1	13.4	24.0	15	2	120
SYSD12C	2D	12.0	13.3	1	19.0	32.0	11	1	75
SYSD15C	2J	15.0	16.7	1	24.0	38.0	10	1	68
SYSD18C	2K	18.0	20.0	1	29.0	45.0	9	1	57
SYSD20C	2L	20.0	22.3	1	35.0	50.0	8	1	52
SYSD24C	2H	24.0	26.7	1	43.0	52.0	7	1	50
SYSD36C	2N	36.0	40.0	1	60.0	75.0	4.5	1	35

## ELECTRICAL CHARACTERISTICS CURVE

