

TUSD05CU

Unidirectional TVS Diode

APPLICATIONS

- ◆ Cellular Handsets and Accessories
- ◆ Portable Electronics
- ◆ Industrial Controls
- ◆ Set-Top Box
- ◆ Instrumentation
- ◆ Servers, Notebook, and Desktop PC
- ◆ Display Ports

IEC COMPATIBILITY

- ◆ IEC61000-4-2 (ESD) $\pm 25\text{kV}$ (air), $\pm 15\text{kV}$ (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50 η s)

FEATURES

- ◆ 180 Watts Peak Pulse Power per Line ($t_p=8/20\mu\text{s}$)
- ◆ Protects one I/O line
- ◆ Low clamping voltage
- ◆ Working voltages : 5.0V
- ◆ Low leakage current

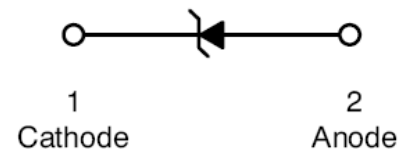
MECHANICAL CHARACTERISTICS

- ◆ FBP-02C Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 2 Milligrams (Approximate)
- ◆ Quantity Per Reel : 5,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free

FBP-02C



PIN CONFIGURATION

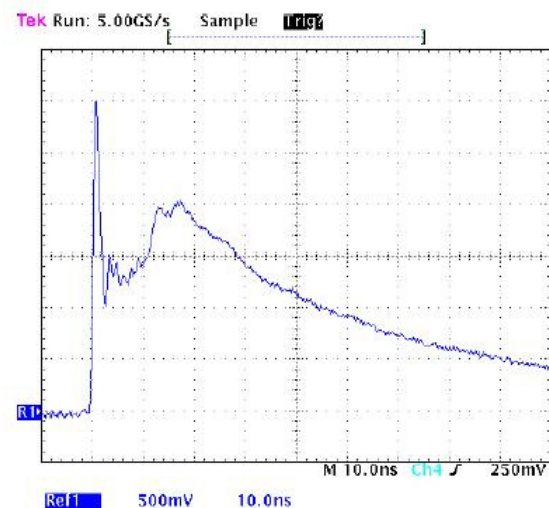
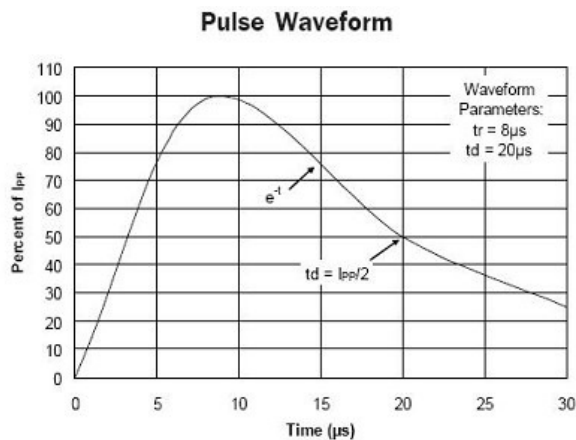


DEVICE CHARACTERISTICS

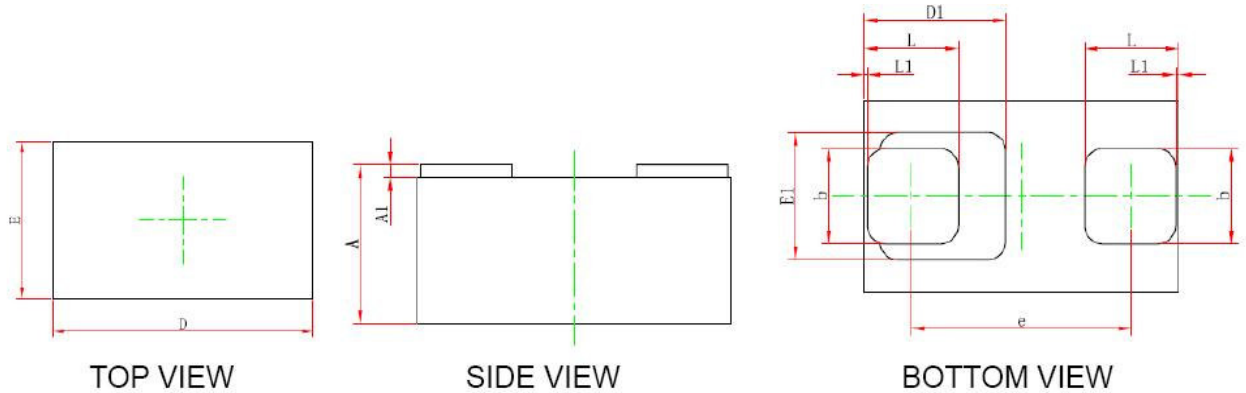
MAXIMUM RATINGS (@ 25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs waveform)	P _{pp}	180	Watts
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 ~ 150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS PER LINE (@ 25°C Unless Otherwise Specified)									
PART NUMBER	DEVICE MARKING	V _{RWM}	V _B	I _T	V _C	V _C		I _R	C _T
		(V) (max.)	(V) (min.)	(mA)	@1A (max.)	(max.)	(@A)	(μA) (max.)	(pF) (max.)
TUSD05CU	RX	5	6	1	8	8	1	1	0.9

ESD Pulse Waveform (Per IEC 61000-4-2)



FBP-02C PACKAGE OUTLINE & DIMENSIONS



PACKAGE DIMENSIONS

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450	0.550	0.018	0.022
A1	0.010	0.070	0.000	0.003
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
D1	0.450REF.		0.018REF.	
E1	0.400REF.		0.016REF.	
b	0.275	0.325	0.011	0.013
e	0.675	0.725	0.027	0.029
L	0.275	0.325	0.011	0.013
L1	0.010REF.		0.000REF.	

* SOLDERING FOOTPRINT

