



## Axial Lead Bidirectional Transient Voltage Suppression Diode TVS 10KA Surge Suppressor

Our Product Introduction

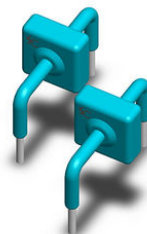
### Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: UL, REACH, RoHS, ISO
- Model Number: KC-066
- Minimum Order Quantity: Negotiable
- Price: Negotiable
- Packaging Details: bulk
- Delivery Time: 1-3 weeks



### Product Specification

- Key Words: TVS Diodes
- Package Type: Axial Lead Terminals
- Other Name: Semiconductor Components
- Vac: 45V
- Vdc: 66V
- Vbr@It (Min.): 70V
- It: 10mA
- Ipp: 10KA
- Vc@Ipp: 125V
- Ir@Vdc: 20μA
- Function: Protection Device
- Highlight:  
**Bidirectional Transient Voltage Suppression Diode 10KA**  
,  
**Bidirectional Transient Voltage Suppression Diode TVS**



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## Product Description

### Axial Lead Terminals Bi-Directional TVS Diode KC-066 10KA Blue Powder Surge Suppressor

**DATASHEET:** [KC\\_v211.1.pdf](#)

#### Description:

TVS tubes are widely used for the protection of semiconductors and sensitive devices, usually for diode protection. They are characterised by their fast response time (PS level), small size, high transient pulse suppression power and low clamping voltage.

Part Number	Reverse Stand-Off Voltage		Breakdown Voltage	Test Current	Current Rating	Maximum Clamping Voltage	Reverse Leakage
	VAC(V)	VDC(V)	$V_{BR}(V)$ MIN.@ $I_T$	$I_T$ (mA)	$I_{PP}$ 8/20 $\mu$ s (KA)	$V_C(V)$ @ $I_{PP}$	$I_R(\mu A)$ @VDC
KC-012	8.5	12.8	14	10	10	28	20
KC-015	11	15	17	10	10	30	20
KC-020	14	20	22	10	10	40	20
KC-025	17	25	28	10	10	50	20
KC-030	21	30	33	10	10	60	20
KC-042	30	42	47	10	10	77	20
KC-058	40	58	64	10	10	110	20
KC-066	45	66	70	10	10	125	20
KC-076	54	76	83	10	10	135	20
KC-100	72	100	110	10	10	165	20
KC-133	100	133	147	10	10	220	20
KC-170	130	170	180	10	10	260	20
KC-190	145	190	200	10	10	290	20
KC-200	150	200	222	10	10	330	20
KC-240	180	240	250	10	10	340	20
KC-380	275	380	401	10	10	520	20
KC-430	310	430	440	10	10	625	20

#### Features:

Axial lead terminals  
High current transient suppressor  
Excellent Clamping Capability  
Glass Passivated Junction  
Bi-directional

Parameter	Symbol	Value	Unit
Operating junction	$T_J$	-55 to +150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C
Current Rating <sup>1</sup>	$I_{PP}$	10	KA

#### Notes:

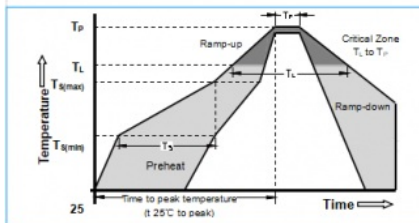
1. Rated IPP measured with 8 × 20 $\mu$ s pulse.

Weight	Contact manufacturer
Case	Epoxy encapsulated
Terminal	Silver plated leads, solderable per MIL-STD-750, Method 2026

#### Functional Diagram



## Soldering Parameters



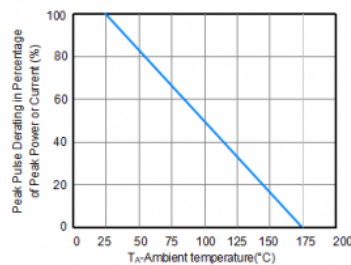
## Flow/Wave Soldering (Solder Dipping)

Peak Temperature :	265°C
Dipping Time :	10 seconds
Soldering :	1 time

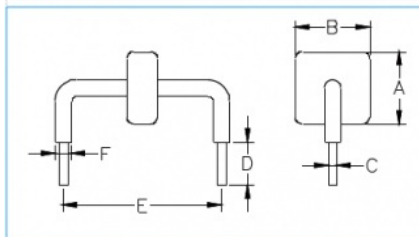
Reflow Condition		Lead-free assembly
Pre Heat	-Temperature Min ( $T_{s(min)}$ )	150°C
	-Temperature Max ( $T_{s(max)}$ )	200°C
	-Time (min to max) ( $T_d$ )	60 -180 Seconds
Average ramp up rate ( Liquidus Temp $T_L$ ) to peak		3°C/second max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3°C/second max
Reflow	- Temperature ( $T_L$ ) (Liquidus)	217°C
	- Time (min to max) ( $T_L$ )	60 -150 Seconds
Peak Temperature ( $T_P$ )		260 +0/-5°C
Time within 5°C of actual peak Temperature ( $t_p$ )		20 -40 Seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature ( $T_P$ )		8 minutes Max
Do not exceed		280°C

## Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

### Pulse Derating Curve

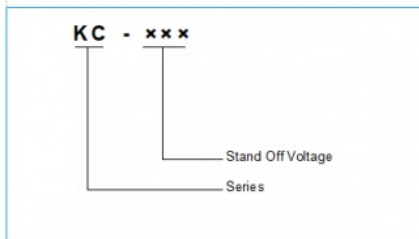


## Dimensions

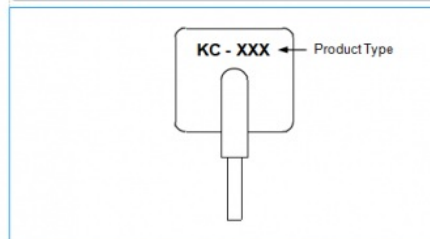


Dimensions	Inches	Millimeters
A	max 0.571	max 14.5
B	Max0.500	max 12.7
C	$\Phi 0.051 \pm 0.004$	$\Phi 1.30 \pm 0.1$
D	$0.236 \pm 0.040$	$6.0 \pm 1.0$
E	$0.950 \pm 0.028$	$24.15 \pm 0.7$
F	max 0.10	max 2.5

## Part Numbering



## Part Marking



## FAQ

Q1. Can I have a sample order ?

A: Yes, we welcome sample order to test and check quality. Mixed samples are acceptable.

Q2. What about the lead time?

A: Sample needs 1 days, mass production time needs 1-2 weeks for order quantity more than

Q3. Do you have any MOQ ?

A: MOQ depend on the type of product, 1pc for sample checking is available

Q4. How do you ship the goods and how long does it take to arrive?

A: We usually ship by DHL, UPS, FedEx or TNT. It usually takes 3-5 days to arrive. Airline and sea shipping also optional.

Q5. How to proceed an order ?

A: Firstly let us know your requirements or application.

Secondly We quote according to your requirements or our suggestions.

Thirdly customer confirms the samples and places deposit for formal order.

Fourthly We arrange the production.

Q6: Do you offer guarantee for the products?

A: Yes, we offer 2-5 years warranty to our products.



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