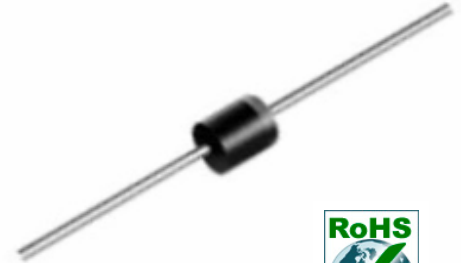


## 15KW Transient Voltage Suppressor

### Features

- Stand-off voltage from 17 to 280 volts
- Glass passivated junction
- 15KW peak pulse power capability on 10/1000 $\mu$ s waveform repetition rate(duty cycle): 0.05%
- Fast response time: typically less than 1.0ps from 0v to VBR  
Bidirectional less than 10ns
- Low incremental surge resistance, excellent clamping capability
- High temperature soldering guaranteed:  
265°C/10 seconds, 0.375" (9.5mm) lead length at 5lbs. (2.3kg tension)
- 15KPA series is UL recognized under component index. File number E315008
- RoHS Compliant



T6L



### Mechanical Data

<b>Case:</b>	Molded plastic body over glass passivated junction
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Plated axial leads, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes the cathode except Bi-directional
<b>Mounting position:</b>	Any
<b>Weight:</b>	0.07 ounce, 2.5 grams

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	Value	Unit	Conditions
<b>V<sub>WM</sub></b>	Maximum Recurrent Peak Reverse Voltage	17 to 280	V	
<b>P<sub>PPM</sub></b>	Peak Pulse Power Dissipation on 10/1000 $\mu$ s Waveform	15	KW	Note 1
<b>P<sub>D</sub></b>	Steady State Power Dissipation on infinite heat sink at TL=75° C	8.0	W	
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current, Uni-directional only	400	A	8.3ms single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance to Ambient	40	° C/W	
<b>R<sub>thJL</sub></b>	Typical Thermal Resistance to Lead	8.0	° C/W	
<b>T<sub>J</sub>,T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to +175	° C	

# 15KW Transient Voltage Suppressor

## 15KPA17A - 15KPA280CA

Notes: (1) Non-repetitive current pulse, per Fig.3 and derated above TA = 25°C per Fig. 2

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

P/N (Note2)		Stand-Off Voltage	Breakdown Voltage @ IT			Max. Clamping Vltg. @ IPPM	Max. Peak Pulse Current	Max. Reverse Leakage Current @ VWM
Uni-Polar	Bi-Polar		VBR		IT (mA)			
		VWM (V)	Min.	Max.		Vc (V)	IPPM (A) (Note1)	ID (µA) (Note1)
15KPA17A	15KPA17CA	17.0	18.99	20.79	50.0	29.3	515.4	5000
15KPA18A	15KPA18CA	18.0	20.11	22.01	50.0	30.9	488.7	5000
15KPA20A	15KPA20CA	20.0	22.34	24.46	20.0	34.3	440.2	1500
15KPA22A	15KPA22CA	22.0	24.57	26.91	10.0	37.1	407.0	500
15KPA24A	15KPA24CA	24.0	26.81	29.35	5.0	40.7	371.0	150
15KPA26A	15KPA26CA	26.0	29.04	31.80	5.0	44.0	343.2	50
15KPA28A	15KPA28CA	28.0	31.28	34.24	5.0	47.5	317.9	25
15KPA30A	15KPA30CA	30.0	33.51	36.70	5.0	50.7	297.8	15
15KPA33A	15KPA33CA	33.0	36.90	40.40	5.0	54.7	276.1	2
15KPA36A	15KPA36CA	36.0	40.20	44.00	5.0	59.8	252.5	2
15KPA40A	15KPA40CA	40.0	44.70	48.90	5.0	65.8	229.5	2
15KPA43A	15KPA43CA	43.0	48.00	52.60	5.0	69.8	216.3	2
15KPA45A	15KPA45CA	45.0	50.30	55.00	5.0	72.8	207.4	2
15KPA48A	15KPA48CA	48.0	53.60	58.70	5.0	77.7	194.3	2
15KPA51A	15KPA51CA	51.0	57.00	62.40	5.0	82.9	182.1	2
15KPA54A	15KPA54CA	54.0	60.30	66.00	5.0	87.7	172.2	2
15KPA58A	15KPA58CA	58.0	64.80	70.90	5.0	93.8	161.0	2
15KPA60A	15KPA60CA	60.0	67.00	73.40	5.0	97.4	155.0	2
15KPA64A	15KPA64CA	64.0	71.50	78.30	5.0	104.2	144.9	2
15KPA70A	15KPA70CA	70.0	78.20	85.60	5.0	113.6	132.9	2
15KPA75A	15KPA75CA	75.0	83.80	91.70	5.0	122.0	123.8	2
15KPA78A	15KPA78CA	78.0	87.10	95.40	5.0	126.1	119.7	2
15KPA85A	15KPA85CA	85.0	94.90	104.00	5.0	137.6	109.7	2
15KPA90A	15KPA90CA	90.0	100.50	110.10	5.0	145.6	103.7	2

# 15KW Transient Voltage Suppressor

## 15KPA17A - 15KPA280CA

P/N (Note2)		Stand-Off Voltage	Breakdown Voltage @ IT			Max. Clamping Vltg. @ IPPM	Max. Peak Pulse Current	Max. Reverse Leakage Current @ VWM
			VBR		IT (mA)			
Uni-Polar	Bi-Polar	VWM (V)	Min.	Max.			Vc (V)	IPP (A) (Note1)
15KPA100A	15KPA100CA	100.0	111.70	122.30	5.0	161.3	93.6	2
15KPA110A	15KPA110CA	110.0	122.90	134.50	5.0	178.6	84.5	2
15KPA120A	15KPA120CA	120.0	134.00	146.80	5.0	192.3	78.5	2
15KPA130A	15KPA130CA	130.0	145.20	159.00	5.0	208.3	72.5	2
15KPA150A	15KPA150CA	150.0	167.60	183.50	5.0	241.9	62.4	2
15KPA160A	15KPA160CA	160.0	178.70	195.70	5.0	258.6	58.4	2
15KPA170A	15KPA170CA	170.0	189.90	207.90	5.0	272.7	55.4	2
15KPA180A	15KPA180CA	180.0	201.10	220.10	5.0	288.5	52.3	2
15KPA200A	15KPA200CA	200.0	223.40	244.60	5.0	319.1	47.3	2
15KPA220A	15KPA220CA	220.0	245.70	269.10	5.0	356.0	42.4	2
15KPA240A	15KPA240CA	240.0	268.10	293.50	5.0	384.6	39.3	2
15KPA260A	15KPA260CA	260.0	290.40	318.00	5.0	416.7	36.2	2
15KPA280A	15KPA280CA	280.0	312.80	342.40	5.0	454.5	33.2	2

**Note:** 1. For Bi-directional types with Vwm of 10 volts and less, the Id limit is doubled.  
2. C suffix for Bidirectional use, A suffix for 5% tolerance.

# 15KW Transient Voltage Suppressor

## 15KPA17A - 15KPA280CA

### Typical Characteristics Curves

Fig.1- Peak Pulse Power Rating Curve

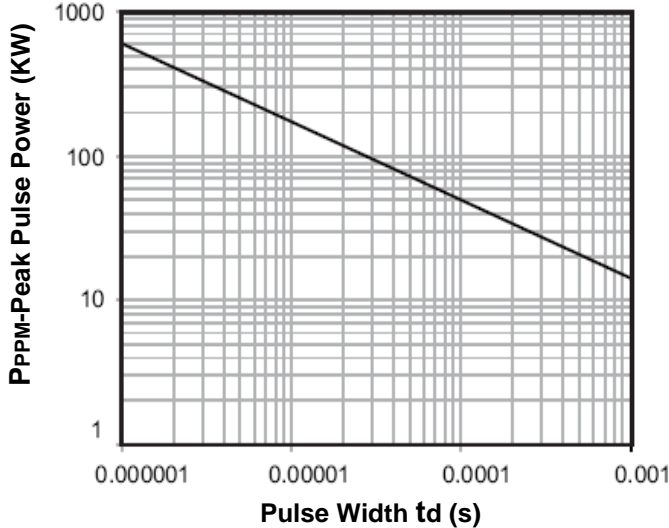


Fig.2- Pulse Derating Curve

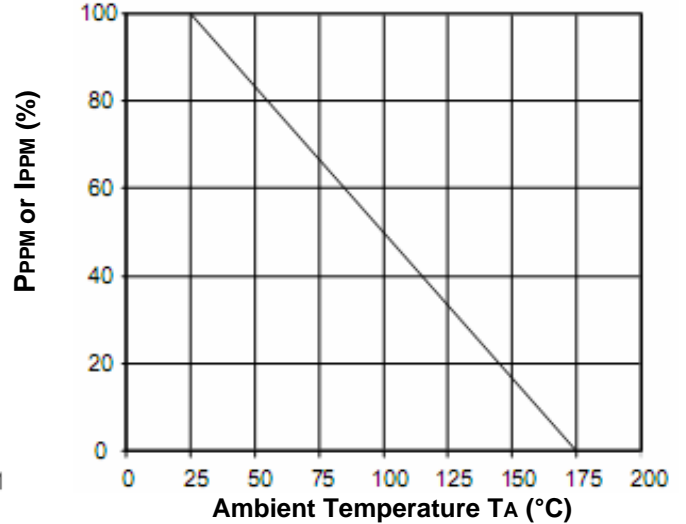


Fig.3- Pulse Waveform

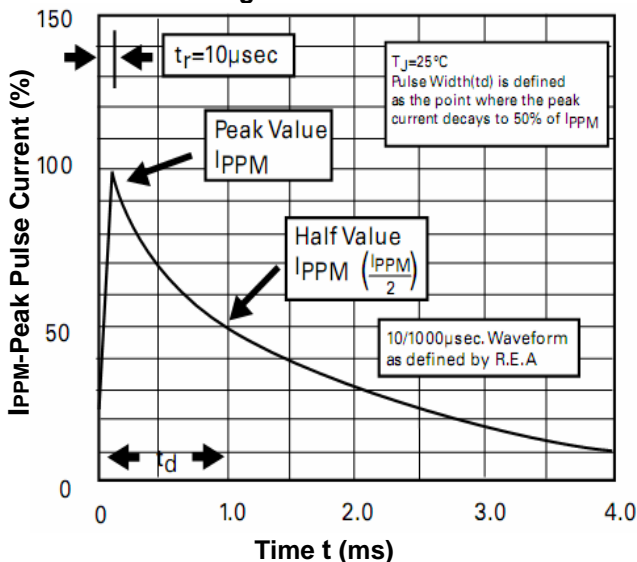
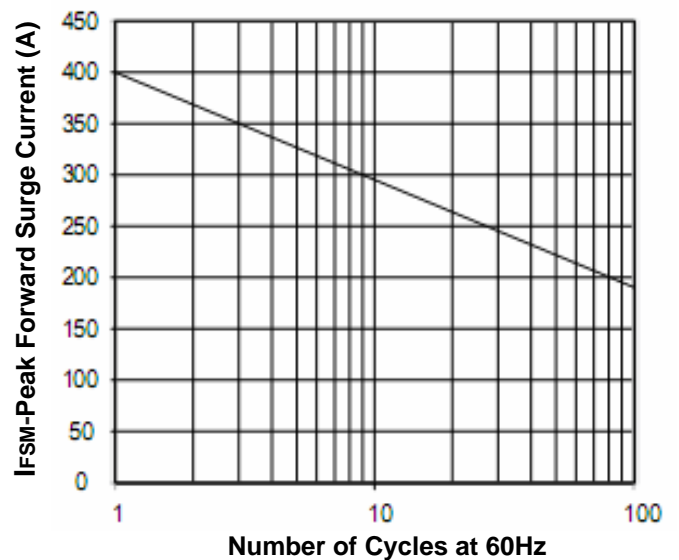
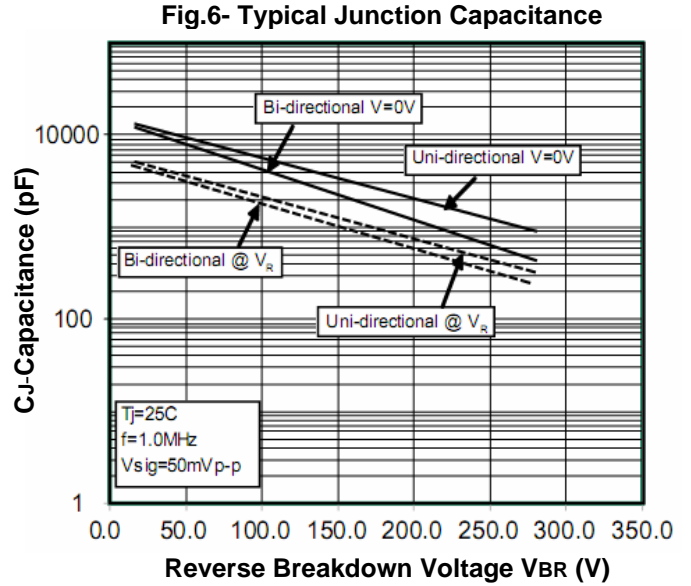
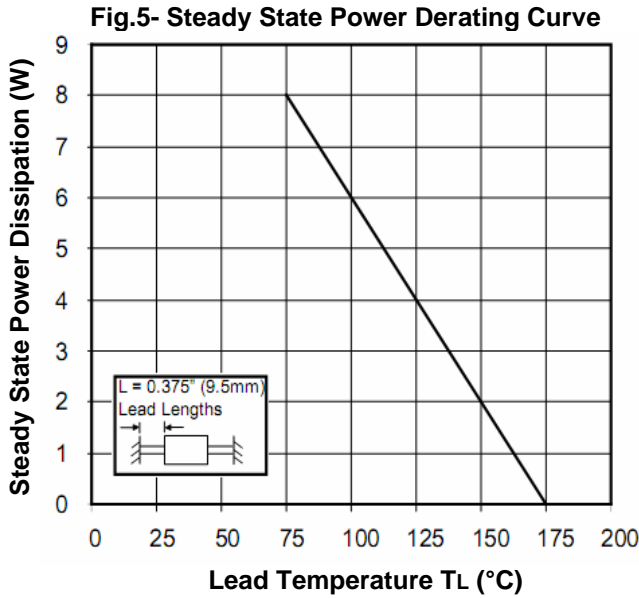


Fig.4- Max. Non-Repetitive Forward Surge Current Uni-directional only



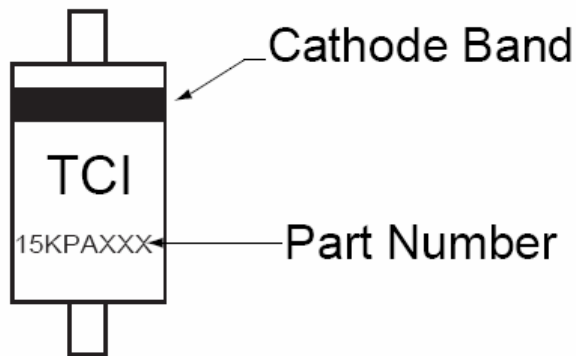
# 15KW Transient Voltage Suppressor

## 15KPA17A - 15KPA280CA

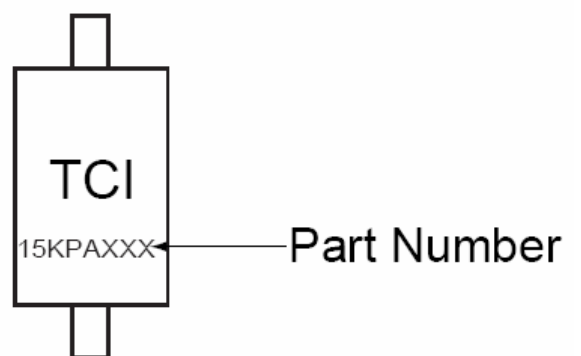


### Marking Information

Uni-directional



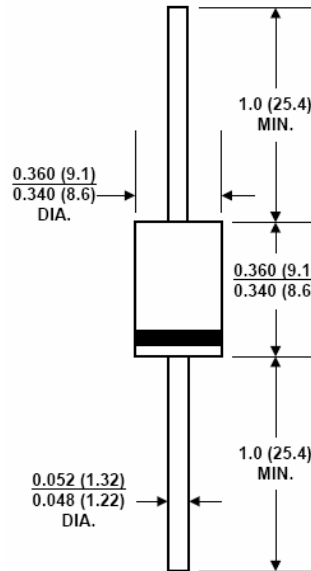
Bi-directional



# 15KW Transient Voltage Suppressor

## 15KPA17A - 15KPA280CA

### Dimensions in inch (mm)



Case T6L

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