

# 15KP85A-TP Datasheet

[www.digi-electronics.com](http://www.digi-electronics.com)



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	15KP85A-TP-DG
Manufacturer	<a href="#">Micro Commercial Co</a>
Manufacturer Product Number	15KP85A-TP
Description	TVS DIODE 85VWM 137VC R6
Detailed Description	137V Clamp Ipp Tvs Diode Through Hole R-6

This model 15KP85A-TP is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.

## Purchase and inquiry

Manufacturer Product Number:

15KP85A-TP

Series:

-

Type:

Zener

Voltage - Reverse Standoff (Typ):

85V

Voltage - Clamping (Max) @ Ipp:

137V

Power - Peak Pulse:

15000W (15kW)

Applications:

General Purpose

Operating Temperature:

-55°C ~ 175°C (TJ)

Package / Case:

R-6, Axial

Base Product Number:

15KP85

Manufacturer:

Micro Commercial Co

Product Status:

Active

Unidirectional Channels:

1

Voltage - Breakdown (Min):

94.4V

Current - Peak Pulse (10/1000µs):

-

Power Line Protection:

No

Capacitance @ Frequency:

-

Mounting Type:

Through Hole

Supplier Device Package:

R-6

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

	<b>E480232</b>
--	----------------

**Features**

- Fast Response Time
- Glass Passivated Junction and Plastic Package Devices
- Low Incremental Surge Resistance
- High Temperature Soldering Guaranteed
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- For Bidirectional Devices Add "C" To The Suffix of The Part Number: i.e. 15KP17CA for 5% Tolerance

**Mechanical Data**

- Polarity :Color Band Denotes Cathodes Except Bipolar
- Weight: 0.07 ounce, 2.5 grams
- Terminals: Plated Axial leads, Solderable Per MIL-STD-750, Methode 2026

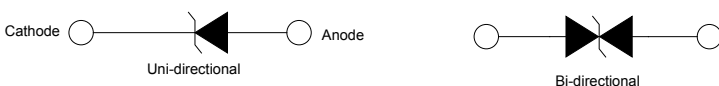
**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C

Peak Pulse Power Dissipation with a 10/1000µs Waveform	$P_{PPM}$	15000W(Min.)	
Steady State Power Dissipation	$P_{M(AV)}$	8.0 W	$T_L=75^{\circ}C$ , Lead lengths.375", (9.5mm)
Response Time	typically less than 1.0ps from 0 Volts to BV		
	bidirectional less than 10ns		

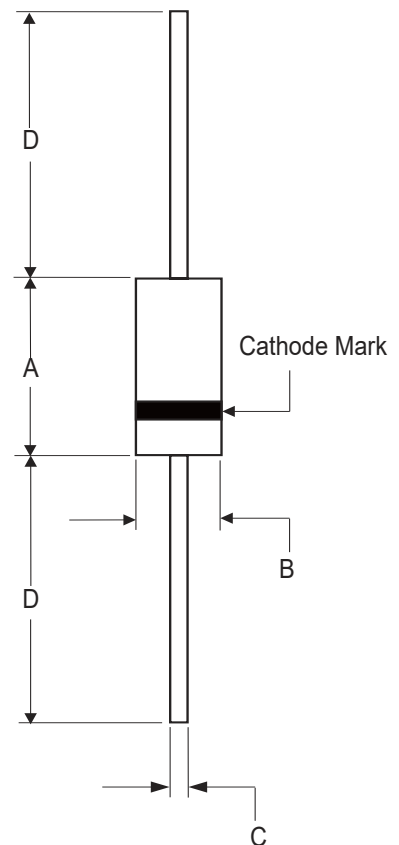
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.

Pin Configuration:



**15000Watts TVS  
17 to 280 Volts**

**R-6**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.340	0.360	8.60	9.10	
B	0.340	0.360	8.60	9.10	
C	0.048	0.052	1.20	1.32	
D	1.000	-----	25.40	-----	

## Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC PART NUMBER		REVERSE STAND- OFF VOLTAGE $V_{RWM}$	BREAKDOWN VOLTAGE $V_{BR}$ MIN. @ $I_T$	BREAKDOWN VOLTAGE $V_{BR}$ MAX. @ $I_T$	TEST CURRENT $I_T$ (mA)	PEAK PULSE CURRENT $I_{pp}$	MAXIMUM REVERSE LEAKAGE $I_R$ @ $V_{RWM}$	CLAMPING VOLTAGE $V_C$ @ $I_{pp}$
UNI-POLAR	BI-POLAR	V	V	V	mA	A	$\mu$ A	V
15KP17A	15KP17CA	17	18.9	20.79	50	512	5000	29.3
15KP18A	15KP18CA	18	20.0	22.01	50	485	5000	30.9
15KP20A	15KP20CA	20	22.2	24.46	20	437	1500	34.3
15KP22A	15KP22CA	22	24.4	26.91	10	404	500	37.1
15KP24A	15KP24CA	24	26.7	29.35	5	369	150	40.5
15KP26A	15KP26CA	26	28.9	31.8	5	347	50	44
15KP28A	15KP28CA	28	31.1	34.24	5	316	25	47.5
15KP30A	15KP30CA	30	33.3	36.69	5	296	15	50.7
15KP33A	15KP33CA	33	36.7	40.4	5	274	10	54.8
15KP36A	15KP36CA	36	40.0	44	5	251	10	59.7
15KP40A	15KP40CA	40	44.4	48.9	5	228	10	65.8
15KP43A	15KP43CA	43	47.8	52.6	5	215	10	69.7
15KP45A	15KP45CA	45	50.0	55	5	205	10	73
15KP48A	15KP48CA	48	53.3	58.7	5	193	10	77.7
15KP51A	15KP51CA	51	56.7	62.4	5	181	10	82.8
15KP54A	15KP54CA	54	60.0	66	5	171	10	87.5
15KP58A	15KP58CA	58	64.4	70.9	5	160	10	94
15KP60A	15KP60CA	60	66.7	73.4	5	154	10	97.3
15KP64A	15KP64CA	64	71.1	78.3	5	144	10	104
15KP70A	15KP70CA	70	77.8	85.6	5	132	10	114
15KP75A	15KP75CA	75	83.3	91.7	5	123	10	122
15KP78A	15KP78CA	78	86.7	95.4	5	119	10	126
15KP85A	15KP85CA	85	94.4	104	5	109	10	137
15KP90A	15KP90CA	90	100.0	110.1	5	103	10	146
15KP100A	15KP100CA	100	111.0	122.3	5	93	10	162
15KP110A	15KP110CA	110	122.0	134.5	5	84	10	178
15KP120A	15KP120CA	120	133.0	146.8	5	78	10	193
15KP130A	15KP130CA	130	144.0	159	5	72	10	209
15KP150A	15KP150CA	150	167.0	183.5	5	62	10	243
15KP160A	15KP160CA	160	178.0	195.7	5	58	10	259
15KP170A	15KP170CA	170	189.0	207.9	5	55	10	275
15KP180A	15KP180CA	180	200.0	220.1	5	52	10	291
15KP200A	15KP200CA	200	222.0	244.6	5	47	10	322
15KP220A	15KP220CA	220	245.0	269.1	5	42	10	356
15KP240A	15KP240CA	240	267.0	293.5	5	39	10	388
15KP260A	15KP260CA	260	289.0	318	5	36	10	419
15KP280A	15KP280CA	280	311.0	342.4	5	33	10	452

For bi-directional type having  $V_{RWM}$  of 30 volts and less , the  $I_R$  limit is double.  
 For parts without A , the  $V_{BR}$  is  $\pm 10\%$

Curve Characteristics

Fig. 1 - Peak Pulse Power Rating Curve

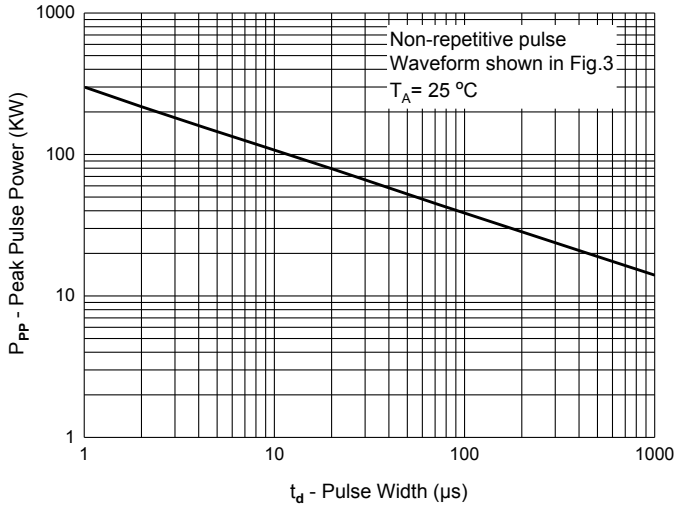


Fig. 2 - Typical Junction Capacitance

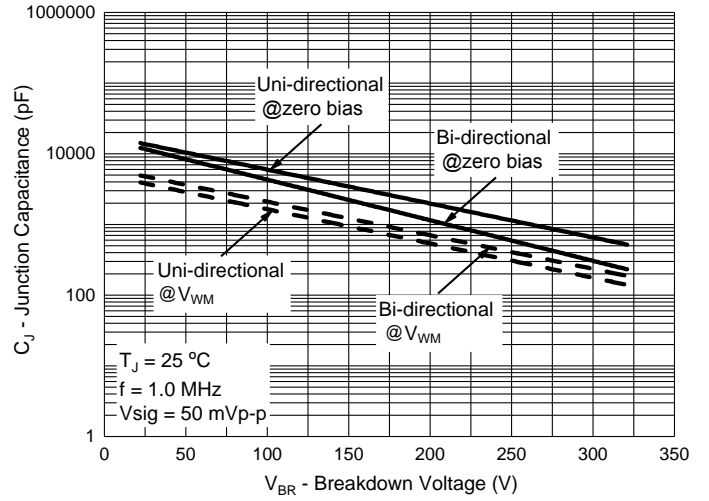


Fig. 3 - Pulse Waveform

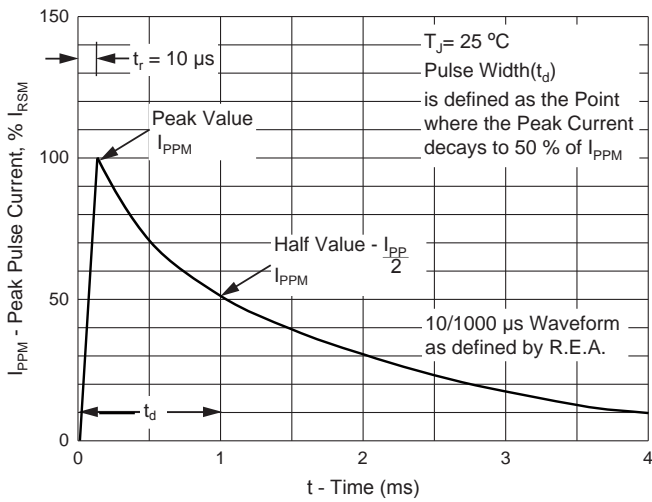
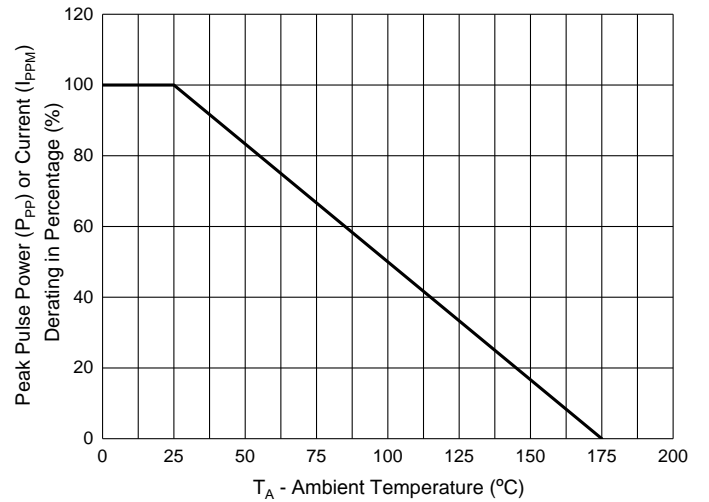


Fig. 4 - Pulse Derating Curve



## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel: 500pcs/Reel
(Part Number)-AP	Ammo Packing: 450pcs/Ammo Box
(Part Number)-BP	Bulk: 200pcs/Box ;4.8Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp** . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp** . and all the companies whose products are represented on our website, harmless against all damages. **Micro Commercial Components Corp.** products are sold subject to the general terms and conditions of commercial sale, as published at <https://www.mccsemi.com/Home/TermsAndConditions>.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

## OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)



Tel: +00 852-30501935

RFQ Email: [Info@DiGi-Electronics.com](mailto:Info@DiGi-Electronics.com)

DiGi is a global authorized distributor of electronic components.