



Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

TZX2V4
THRU
TZX36

Features

- Very sharp reverse characteristic
Low reverse current level
Very high stability
available with tighter tolerances
Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Mechanical Data

- Case: Standard Glass Case
Marking : Cathode band and type number
Moisture Sensitivity Level 1

Maximum Ratings*

Table with 4 columns: Parameter, Symbol, Value, Units. Rows include Max. Steady State Power Dissipation, Junction Temperature, Storage Temperature Range, and Thermal Resistance.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Table with 4 columns: Parameter, Symbol, Maximum, Unit. Row: Max. Forward Voltage @ IF=100mA, VF, 1.5, V

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

500mW Silicon Zener Diodes

DO-35

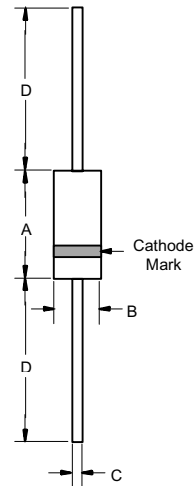


Table with 6 columns: DIM, INCHES (MIN, MAX), MM (MIN, MAX), NOTE. Rows A, B, C, D.

TZX2V4 THRU TZX36

Type	V _{Zmin.} (V)	V _{Zmax.} (V)	Type	V _{Zmin.} (V)	V _{Zmax.} (V)	r _{Zmax.} (Ω)	at I _Z (mA)	I _{Rmax.} (μA)	at V _R (V)
TZX2V4	2.3	2.6	TZX2V4A	2.3	2.5	100	5	5	0.5
TZX2V4	2.3	2.6	TZX2V4B	2.4	2.6	100	5	5	0.5
TZX2V7	2.5	2.9	TZX2V7A	2.5	2.7	100	5	5	0.5
TZX2V7	2.5	2.9	TZX2V7B	2.6	2.8	100	5	5	0.5
TZX2V7	2.5	2.9	TZX2V7C	2.7	2.9	100	5	5	0.5
TZX3V0	2.8	3.2	TZX3V0A	2.8	3.0	100	5	5	0.5
TZX3V0	2.8	3.2	TZX3V0B	2.9	3.1	100	5	5	0.5
TZX3V0	2.8	3.2	TZX3V0C	3.0	3.2	100	5	5	0.5
TZX3V3	3.1	3.5	TZX3V3A	3.1	3.3	100	5	5	1
TZX3V3	3.1	3.5	TZX3V3B	3.2	3.4	100	5	5	1
TZX3V3	3.1	3.5	TZX3V3C	3.3	3.5	100	5	5	1
TZX3V6	3.4	3.8	TZX3V6A	3.4	3.6	100	5	5	1
TZX3V6	3.4	3.8	TZX3V6B	3.5	3.7	100	5	5	1
TZX3V6	3.4	3.8	TZX3V6C	3.6	3.8	100	5	5	1
TZX3V9	3.7	4.1	TZX3V9A	3.7	3.9	100	5	5	1
TZX3V9	3.7	4.1	TZX3V9B	3.8	4.0	100	5	5	1
TZX3V9	3.7	4.1	TZX3V9C	3.9	4.1	100	5	5	1
TZX4V3	4.0	4.5	TZX4V3A	4.0	4.2	100	5	5	1.5
TZX4V3	4.0	4.5	TZX4V3B	4.1	4.3	100	5	5	1.5
TZX4V3	4.0	4.5	TZX4V3C	4.2	4.4	100	5	5	1.5
TZX4V3	4.0	4.5	TZX4V3D	4.3	4.5	100	5	5	1.5
TZX4V7	4.4	4.9	TZX4V7A	4.4	4.6	100	5	5	2
TZX4V7	4.4	4.9	TZX4V7B	4.5	4.7	100	5	5	2
TZX4V7	4.4	4.9	TZX4V7C	4.6	4.8	100	5	5	2
TZX4V7	4.4	4.9	TZX4V7D	4.7	4.9	100	5	5	2
TZX5V1	4.8	5.3	TZX5V1A	4.8	5.0	100	5	5	2
TZX5V1	4.8	5.3	TZX5V1B	4.9	5.1	100	5	5	2
TZX5V1	4.8	5.3	TZX5V1C	5.0	5.2	100	5	5	2
TZX5V1	4.8	5.3	TZX5V1D	5.1	5.3	100	5	5	2
TZX5V6	5.2	5.9	TZX5V6A	5.2	5.5	40	5	5	2
TZX5V6	5.2	5.9	TZX5V6B	5.3	5.6	40	5	5	2
TZX5V6	5.2	5.9	TZX5V6C	5.4	5.7	40	5	5	2
TZX5V6	5.2	5.9	TZX5V6D	5.5	5.8	40	5	5	2
TZX5V6	5.2	5.9	TZX5V6E	5.6	5.9	40	5	5	2
TZX6V2	5.7	6.6	TZX6V2A	5.7	6.0	15	5	1	3
TZX6V2	5.7	6.6	TZX6V2B	5.8	6.1	15	5	1	3
TZX6V2	5.7	6.6	TZX6V2C	6.0	6.3	15	5	1	3
TZX6V2	5.7	6.6	TZX6V2D	6.1	6.4	15	5	1	3
TZX6V2	5.7	6.6	TZX6V2E	6.3	6.6	15	5	1	3
TZX6V8	6.4	7.2	TZX6V8A	6.4	6.7	15	5	1	3.5
TZX6V8	6.4	7.2	TZX6V8B	6.6	6.9	15	5	1	3.5
TZX6V8	6.4	7.2	TZX6V8C	6.7	7.0	15	5	1	3.5
TZX6V8	6.4	7.2	TZX6V8D	6.9	7.2	15	5	1	3.5
TZX7V5	7.0	7.9	TZX7V5A	7.0	7.3	15	5	1	5.0
TZX7V5	7.0	7.9	TZX7V5B	7.2	7.6	15	5	1	5.0

TZX2V4 THRU TZX36

Type	V _{Zmin.} (V)	V _{Zmax.} (V)	Type	V _{Zmin.} (V)	V _{Zmax.} (V)	r _{Zmax.} (Ω)	at I _Z (mA)	I _{Rmax.} (μA)	at V _R (V)
TZX7V5	7.0	7.9	TZX7V5C	7.3	7.7	15	5	1	5.0
TZX7V5	7.0	7.9	TZX7V5D	7.5	7.9	15	5	1	5.0
TZX8V2	7.7	8.7	TZX8V2A	7.7	8.1	20	5	1	6.2
TZX8V2	7.7	8.7	TZX8V2B	7.9	8.3	20	5	1	6.2
TZX8V2	7.7	8.7	TZX8V2C	8.1	8.5	20	5	1	6.2
TZX8V2	7.7	8.7	TZX8V2D	8.3	8.7	20	5	1	6.2
TZX9V1	8.5	9.7	TZX9V1A	8.5	8.9	20	5	1	6.8
TZX9V1	8.5	9.7	TZX9V1B	8.7	9.1	20	5	1	6.8
TZX9V1	8.5	9.7	TZX9V1C	8.9	9.3	20	5	1	6.8
TZX9V1	8.5	9.7	TZX9V1D	9.1	9.5	20	5	1	6.8
TZX9V1	8.5	9.7	TZX9V1E	9.3	9.7	20	5	1	6.8
TZX10	9.5	10.6	TZX10A	9.5	9.9	25	5	1	7.5
TZX10	9.5	10.6	TZX10B	9.7	10.1	25	5	1	7.5
TZX10	9.5	10.6	TZX10C	9.9	10.3	25	5	1	7.5
TZX10	9.5	10.6	TZX10D	10.2	10.6	25	5	1	7.5
TZX11	10.4	11.6	TZX11A	10.4	10.8	25	5	1	8.2
TZX11	10.4	11.6	TZX11B	10.7	11.1	25	5	1	8.2
TZX11	10.4	11.6	TZX11C	10.9	11.3	25	5	1	8.2
TZX11	10.4	11.6	TZX11D	11.1	11.6	25	5	1	8.2
TZX12	11.4	12.7	TZX12A	11.4	11.9	35	5	1	9.5
TZX12	11.4	12.7	TZX12B	11.6	12.1	35	5	1	9.5
TZX12	11.4	12.7	TZX12C	11.9	12.4	35	5	1	9.5
TZX12	11.4	12.7	TZX12D	12.2	12.7	35	5	1	9.5
TZX13	12.4	13.4	TZX13A	12.4	12.9	35	5	1	10
TZX13	12.4	13.4	TZX13B	12.6	13.1	35	5	1	10
TZX13	12.4	13.4	TZX13C	12.9	13.4	35	5	1	10
TZX14	13.2	14.3	TZX14A	13.2	13.7	35	5	1	11
TZX14	13.2	14.3	TZX14B	13.5	14.0	35	5	1	11
TZX14	13.2	14.3	TZX14C	13.8	14.3	35	5	1	11
TZX15	14.1	15.5	TZX15A	14.1	14.7	40	5	1	11.5
TZX15	14.1	15.5	TZX15B	14.5	15.1	40	5	1	11.5
TZX15	14.1	15.5	TZX15C	14.9	15.5	40	5	1	11.5
TZX16	15.3	17.1	TZX16A	15.3	15.9	45	5	1	12
TZX16	15.3	17.1	TZX16B	15.7	16.5	45	5	1	12
TZX16	15.3	17.1	TZX16C	16.3	17.1	45	5	1	12
TZX18	16.9	19.0	TZX18A	16.9	17.7	55	5	1	13
TZX18	16.9	19.0	TZX18B	17.5	18.3	55	5	1	13
TZX18	16.9	19.0	TZX18C	18.1	19.0	55	5	1	13
TZX20	18.8	21.2	TZX20A	18.8	19.7	60	2	1	15
TZX20	18.8	21.2	TZX20B	19.5	20.4	60	2	1	15
TZX20	18.8	21.2	TZX20C	20.2	21.2	60	2	1	15
TZX22	20.9	23.3	TZX22A	20.9	21.9	65	2	1	17
TZX22	20.9	23.3	TZX22B	21.6	22.6	65	2	1	17
TZX22	20.9	23.3	TZX22C	22.3	23.3	65	2	1	17
TZX24	22.9	25.5	TZX24A	22.9	24.0	70	2	1	19
TZX24	22.9	25.5	TZX24B	23.6	24.7	70	2	1	19

TZX2V4 THRU TZX36

Type	V _{Zmin.} (V)	V _{Zmax.} (V)	Type	V _{Zmin.} (V)	V _{Zmax.} (V)	r _{Zmax.} (Ω)	at I _Z (mA)	I _{Rmax.} (μA)	at V _R (V)
TZX24	22.9	25.5	TZX24C	24.3	25.5	70	2	1	19
TZX27	25.2	28.6	TZX27A	25.2	26.6	80	2	1	21
TZX27	25.2	28.6	TZX27B	26.2	27.6	80	2	1	21
TZX27	25.2	28.6	TZX27C	27.2	28.6	80	2	1	21
TZX30	28.2	31.6	TZX30A	28.2	29.6	100	2	1	23
TZX30	28.2	31.6	TZX30B	29.2	30.6	100	2	1	23
TZX30	28.2	31.6	TZX30C	30.2	31.6	100	2	1	23
TZX33	31.2	34.5	TZX33A	31.2	32.6	120	2	1	25
TZX33	31.2	34.5	TZX33B	32.2	33.6	120	2	1	25
TZX33	31.2	34.5	TZX33C	33.2	34.5	120	2	1	25
TZX36	34.2	38.0	TZX36A	34.2	35.7	140	2	1	27
TZX36	34.2	38.0	TZX36B	35.3	36.8	140	2	1	27
TZX36	34.2	38.0	TZX36C	36.4	38.0	140	2	1	27

Characteristics (T_j = 25°C unless otherwise specified)

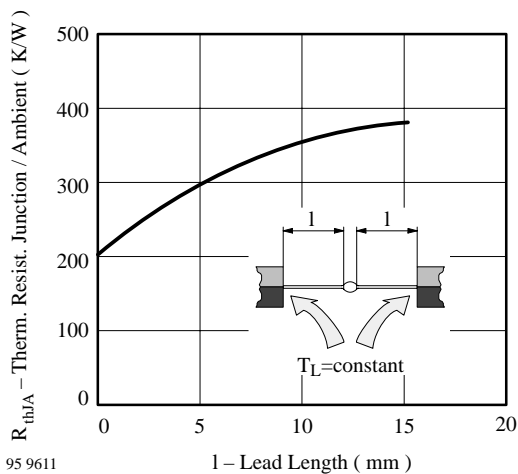


Figure 1. Thermal Resistance vs. Lead Length

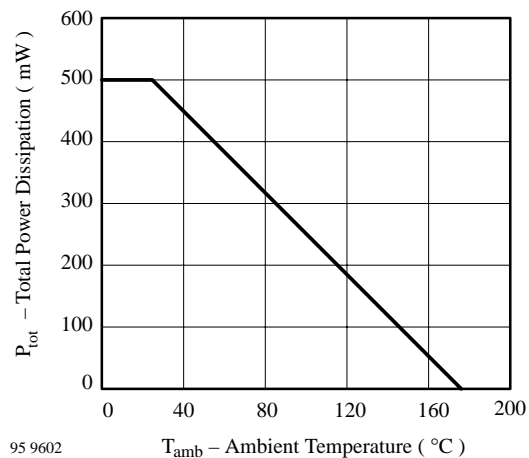


Figure 2. Total Power Dissipation vs. Ambient Temperature

TZX2V4 THRU TZX36

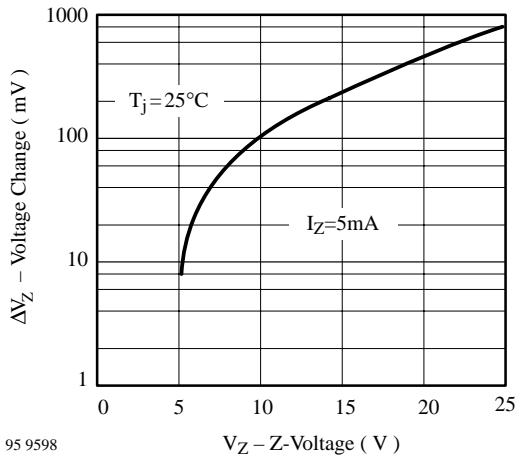


Figure 3. Typical Change of Working Voltage under Operating Conditions at $T_{amb}=25^{\circ}C$

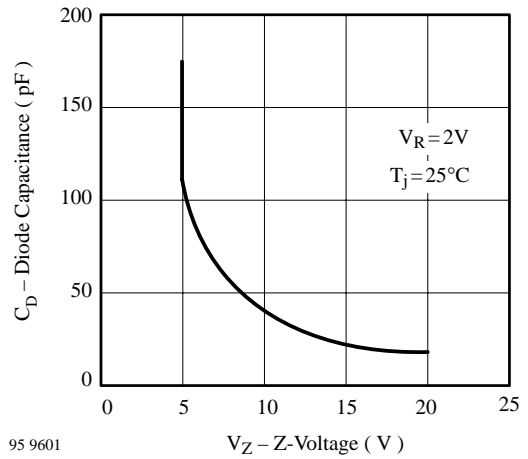


Figure 6. Diode Capacitance vs. Z-Voltage

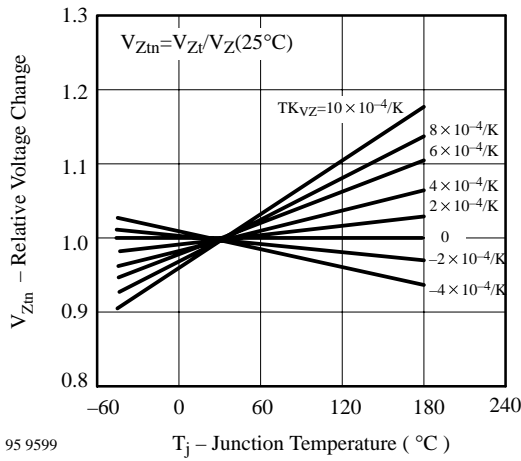


Figure 4. Typical Change of Working Voltage vs. Junction Temperature

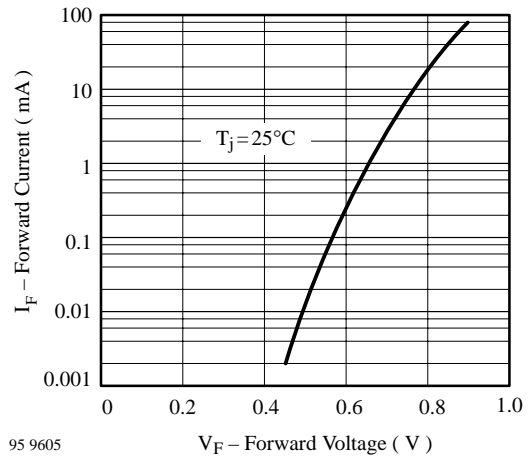


Figure 7. Forward Current vs. Forward Voltage

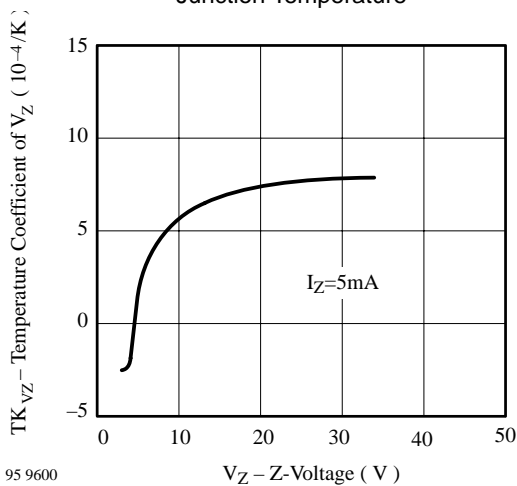


Figure 5. Temperature Coefficient of V_Z vs. Z-Voltage

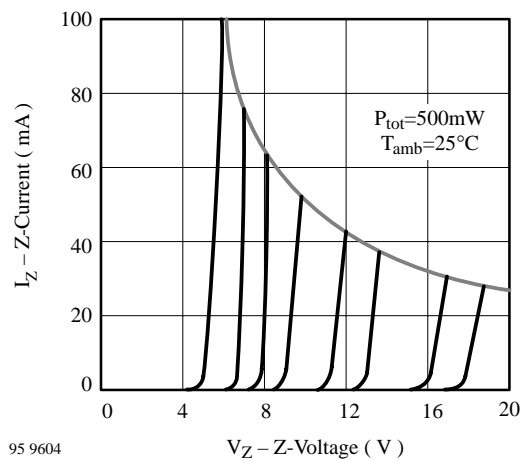
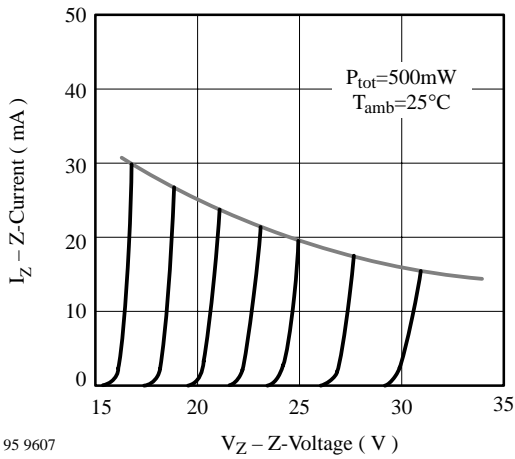


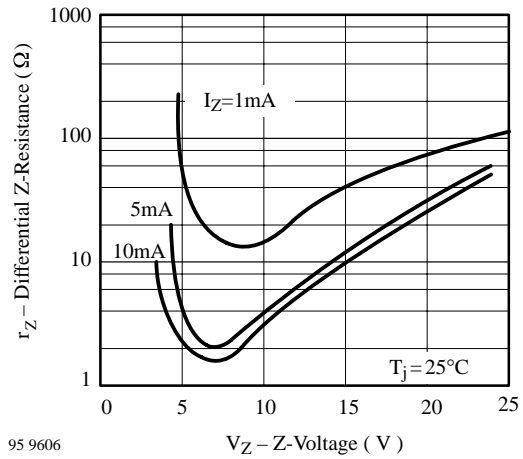
Figure 8. Z-Current vs. Z-Voltage

TZX2V4 THRU TZX36



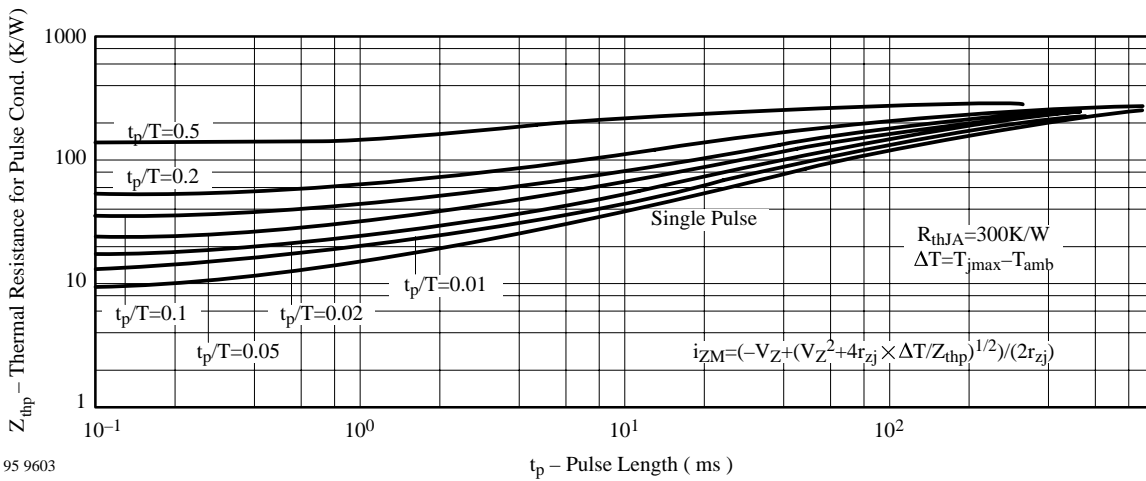
95 9607

Figure 9. Z-Current vs. Z-Voltage



95 9606

Figure 10. Differential Z-Resistance vs. Z-Voltage



95 9603

Figure 11. Thermal Response



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

*****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.

*****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.