



Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311

Phone: (818) 701-4933

Fax: (818) 701-4939

**2EZ5.1D5
THRU
2EZ75D5**

Features

- Glass Passivation Junction
- Lead Free Finish/RoHS Compliant (Note C) ("P" Suffix designates Compliant. See ordering information)
- Excellent Clamping Capability
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- TERMINALS : Solder plated, solderable per MIL-STD-750, method 2026
- POLARITY : Color band denotes positive end (cathode)

Maximum Ratings @ 25°C Unless Otherwise Specified

Peak Pulse Power Dissipation (Note A) Derate above 75°C	P_D	2 26.7	Watts mW/°C
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Note B)	I_{FSM}	15	Amps
Operating And Storage Temperature Range	T_J, T_{STG}	-55°C to +150°C	

NOTES:

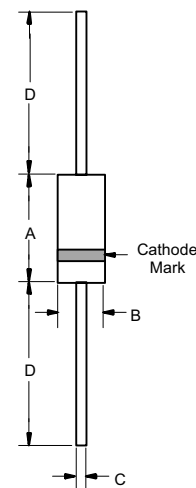
A. Mounted on 5.0mm² (.013mm thick) land areas.

B. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

C. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

**2 W Glass Passivated
Junction Silicon
Zener Diode
5.1-75 Volts**

DO-41



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

2EZ5.1D5 THRU 2EZ75D5

Micro Commercial Components

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted) $V_F=1.2\text{ V max}$, $I_F=200\text{ mA}$ for all types

Type No. (Note 1.)	Nominal Zener Voltage $V_Z@I_{ZT}$ volts (Note 2.)	Test current I_{ZT} mA	Maximum Zener Impedance (Note 3)			Leakage Current		Maximum Zener Current I_{ZM} mA
			$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	I_R	V_R	
			Ohms	Ohms	mA	$\mu\text{A Max}$	Volts	
2EZ5.1D5	5.1	98	3.5	600	1	5.0	1.0	356
2EZ5.6D5	5.6	89.5	2.5	500	1	5.0	2.0	324
2EZ6.2D5	6.2	80.5	1.5	700	1	5.0	3.0	292
2EZ6.8D5	6.8	73.5	2.0	700	1	5.0	4.0	266
2EZ7.5D5	7.5	66.5	2.0	700	0.5	5.0	5.0	242
2EZ8.2D5	8.2	61	2.3	700	0.5	5.0	6.0	220
2EZ9.1D5	9.1	55	2.5	700	0.5	3.0	7.0	200
2EZ10D5	10	50	3.5	700	0.25	3.0	7.6	182
2EZ11D5	11	45.5	4.0	700	0.25	1.0	8.4	166
2EZ12D5	12	41.5	4.5	700	0.25	1.0	9.1	152
2EZ13D5	13	38.5	5.0	700	0.25	0.5	9.9	138
2EZ14D5	14	35.7	5.5	700	0.25	0.5	10.6	130
2EZ15D5	15	33.4	7.0	700	0.25	0.5	11.4	122
2EZ16D5	16	31.2	8.0	700	0.25	0.5	12.2	114
2EZ17D5	17	29.4	9.0	750	0.25	0.5	13.0	107
2EZ18D5	18	27.8	10	750	0.25	0.5	13.7	100
2EZ19D5	19	26.3	11	750	0.25	0.5	14.4	95
2EZ20D5	20	25	11	750	0.25	0.5	15.2	90
2EZ22D5	22	22.8	12	750	0.25	0.5	16.7	82
2EZ24D5	24	20.8	13	750	0.25	0.5	18.2	76
2EZ27D5	27	18.5	18	750	0.25	0.5	20.6	68
2EZ30D5	30	16.6	20	1000	0.25	0.5	22.5	60
2EZ33D5	33	15.1	23	1000	0.25	0.5	25.1	55
2EZ36D5	36	13.9	25	1000	0.25	0.5	27.4	50
2EZ39D5	39	12.8	30	1000	0.25	0.5	29.7	47
2EZ43D5	43	11.6	35	1500	0.25	0.5	32.7	43
2EZ47D5	47	10.6	40	1500	0.25	0.5	35.8	39
2EZ51D5	51	9.8	48	1500	0.25	0.5	38.8	36
2EZ56D5	56	9.0	55	2000	0.25	0.5	42.6	32
2EZ62D5	62	8.1	60	2000	0.25	0.5	47.1	29
2EZ68D5	68	7.4	75	2000	0.25	0.5	51.7	27
2EZ75D5	75	6.7	90	2000	0.25	0.5	56.0	24

Notes:

1. TOLERANCES - Suffix indicates 5% tolerance any other tolerance will be considered as a special device.
2. ZENER VOLTAGE (V_Z) MEASUREMENT - guarantees the zener voltage when measured at 40 ms from the diode body, and an ambient temperature of 25
3. ZENER IMPEDANCE (Z_Z) DERIVATION - The zener impedance is derived from the 60 cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}

RATING AND CHARACTERISTICS CURVES

2EZ5.1D5 THRU 2EZ75D5

M.C.C.

Micro Commercial Components

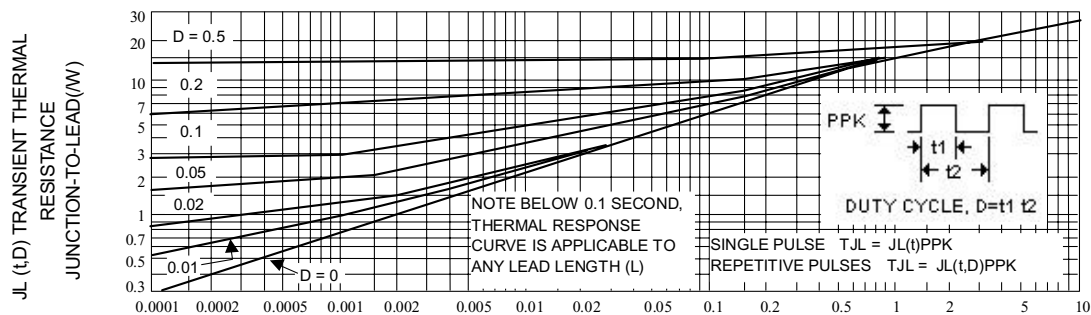


Fig. 2-TYPICAL THERMAL RESPONSE

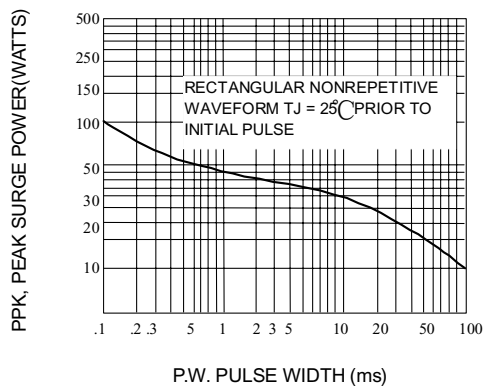


Fig. 3-MAXIMUM SURGE POWER

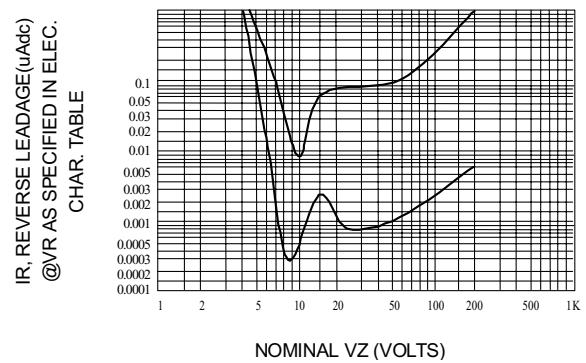


Fig. 4-TYPICAL REVERSE LEAKAGE

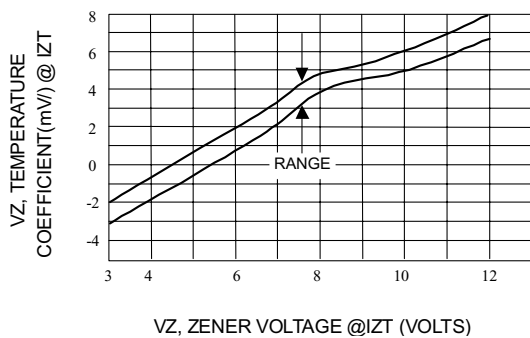


Fig. 5-UNITS 3.9 TO 12 VOLTS

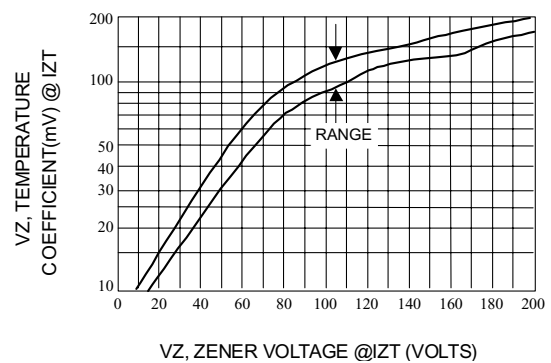


Fig. 6-UNITS 10 TO 200 VOLTS

RATING AND CHARACTERISTICS CURVES
2EZ5.1D5 THRU 2EZ75D5

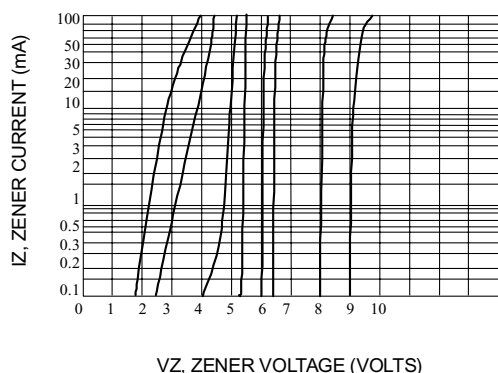


Fig. 7-VZ = 3.9 THRU 10 VOLTS

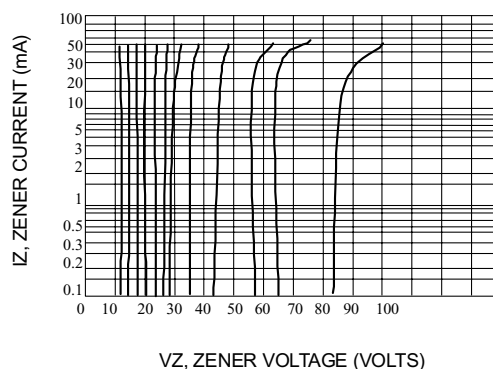


Fig. 8-VZ = 12 THRU 82 VOLTS

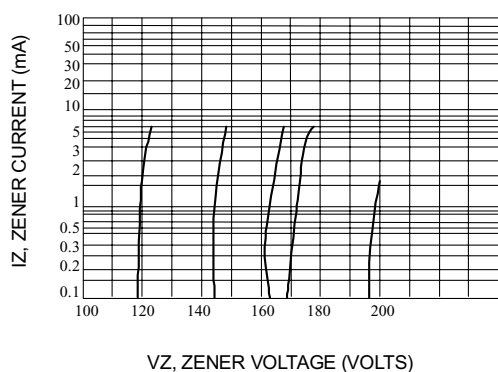


Fig. 9-VZ = 100 THRU 200 VOLTS

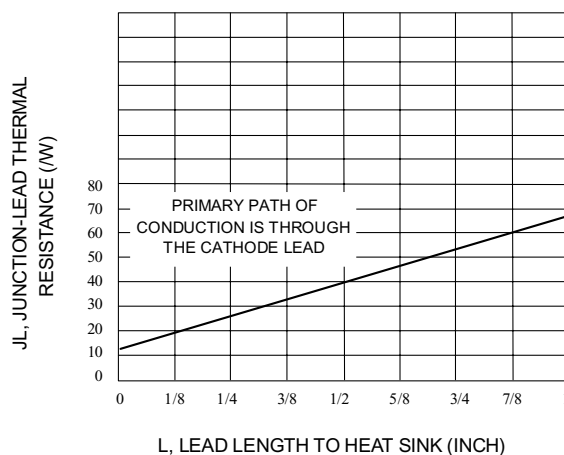


Fig. 10-TYPICAL THERMAL RESISTANCE

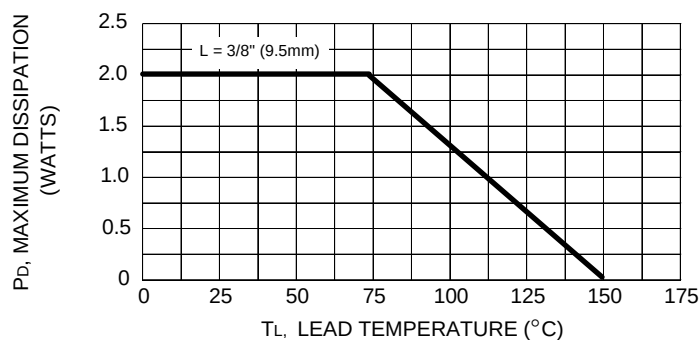


Fig. 11- POWER TEMPERATURE DERATING CURVE



Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/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.

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.