



# Frontier Electronics Corp.

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## 350mW SURFACE MOUNT ZENER DIODE

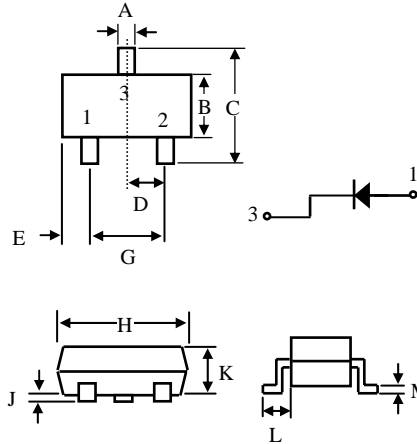
### BZX84C2V4 THRU BZX84C75

#### FEATURES

- LOW COST
- SMALL SIZE

#### MECHANICAL DATA

- CASE: SOT-23, PLASTIC, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: SEE DIAGRAM
- WEIGHT: 0.008 GRAMS



DIM	Min	Max
A	0.30	0.51
B	1.20	1.60
C	2.10	3.00
D	0.85	1.05
E	0.45	1.00
G	1.70	2.10
H	2.70	3.10
J	0.00	0.13
K	0.89	1.30
L	0.30	0.61
M	0.076	0.25

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

JEDEC TYPE NO	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}^*$	TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE LEAKAGE CURRENT	
			$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		IR	TEST VOLTAGE
			OHMS	OHMS	mA	μA	VOLTAGE
BZX84C2V4	2.2 – 2.6	5.0	100	600	1.0	50.00	1.0
BZX84C2V7	2.5 – 2.9	5.0	100	600	1.0	20.00	1.0
BZX84C3	2.8 – 3.2	5.0	95	600	1.0	10.00	1.0
BZX84C3V3	3.1 – 3.5	5.0	95	600	1.0	5.00	1.0
BZX84C3V6	3.4 – 4.1	5.0	90	600	1.0	5.00	1.0
BZX84C3V9	3.7 – 4.1	5.0	90	600	1.0	3.00	1.0
BZX84C4V3	4.0 – 4.6	5.0	90	600	1.0	3.00	1.0
BZX84C4V7	4.4 – 5.0	5.0	80	500	1.0	3.00	2.0
BZX84C5V1	4.8 – 5.4	5.0	60	480	1.0	2.00	2.0
BZX84C5V6	5.2 – 6.0	5.0	40	400	1.0	1.00	2.0
BZX84C6V2	5.8 – 6.6	5.0	10	150	1.0	3.00	4.0
BZX84C6V8	6.4 – 7.2	5.0	15	80	1.0	2.00	4.0
BZX84C7V5	7.0 – 7.9	5.0	15	80	1.0	1.00	5.0
BZX84C8V2	7.7 – 8.7	5.0	15	80	1.0	0.70	5.0
BZX84C9V1	8.5 – 9.6	5.0	15	100	1.0	0.50	6.0
BZX84C10	9.4 – 10.6	5.0	20	150	1.0	0.20	7.0
BZX84C11	10.4 – 11.6	5.0	20	150	1.0	0.10	8.0
BZX84C12	11.4 – 12.7	5.0	25	150	1.0	0.10	8.0
BZX84C13	12.4 – 14.1	5.0	30	170	1.0	0.10	8.0
BZX84C15	13.8 – 15.6	5.0	30	200	1.0	0.10	10.5
BZX84C16	15.3 – 17.1	5.0	40	200	1.0	0.10	11.2
BZX84C18	16.8 – 19.1	5.0	45	225	1.0	0.10	12.6

NOTE : VZ OF ZENER DIODE , V CODE IS INSTEAD OF DECIMAL POINT

\* MEASURED WITH PULSES  $T_p=20m$  SEC

JEDEC TYPE NO	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}^*$	TEST CURRENT $I_{ZT}$	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE LEAKAGE CURRENT	
			$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		IR	TEST VOLTAGE
			OHMS	OHMS	mA	$\mu A$	VOLTAGE
BZX84C20	18.8 – 21.2	5.0	55	225	1.0	0.10	14.0
BZX84C22	20.8 – 23.3	5.0	55	250	1.0	0.10	15.4
BZX84C24	22.8 – 25.6	5.0	70	250	1.0	0.10	16.8
BZX84C27	25.1 – 28.9	2.0	80	300	0.5	0.10	18.9
BZX84C30	28 – 32	2.0	80	300	0.5	0.10	21.0
BZX84C33	31 – 35	2.0	80	325	0.5	0.10	23.1
BZX84C36	34 – 38	2.0	90	350	0.5	0.10	25.2
BZX84C39	37 – 41	2.0	130	350	0.5	0.10	27.3
BZX84C43	40 – 46	2.0	150	375	0.5	0.10	30.1
BZX84C47	44 – 50	2.0	170	375	0.5	0.10	32.9
BZX84C51	48 – 54	2.0	180	400	0.5	0.10	35.7
BZX84C56	52 – 60	2.0	200	425	0.5	0.10	39.2
BZX84C62	58 – 66	2.0	215	450	0.5	0.10	43.4
BZX84C68	64 – 72	2.0	240	475	0.5	0.10	47.6
BZX84C75	70 – 79	2.0	255	500	0.5	0.10	52.5

NOTE : VZ OF ZENER DIODE ,V CODE IS INSTEAD OF DECIMAL POINT

\* MEASURED WITH PULSES  $T_p=20m$  SEC

# RATINGS AND CHARACTERISTIC CURVES BZX84C2V4 THRU BZX84C75

FIG.1- BREAKDOWN CHARACTERISTICS

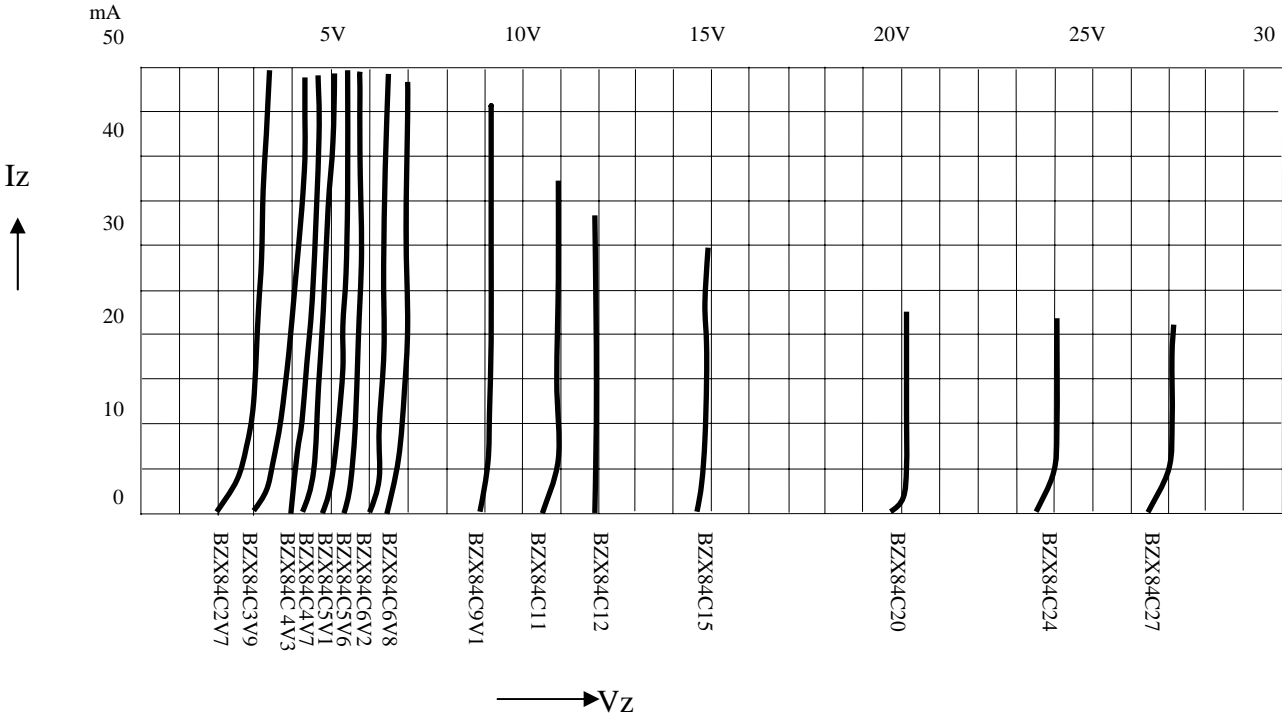
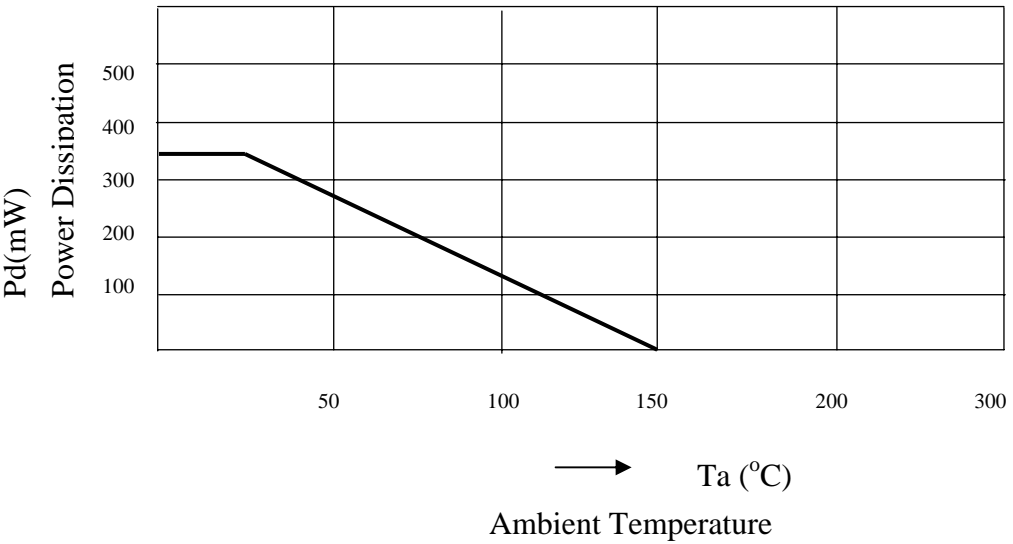


FIG.2- POWER ,TEMPERATURE DERATING CURVE



Notes : Mounted on 5.0mm<sup>2</sup>(0.13mm thick) land areas.