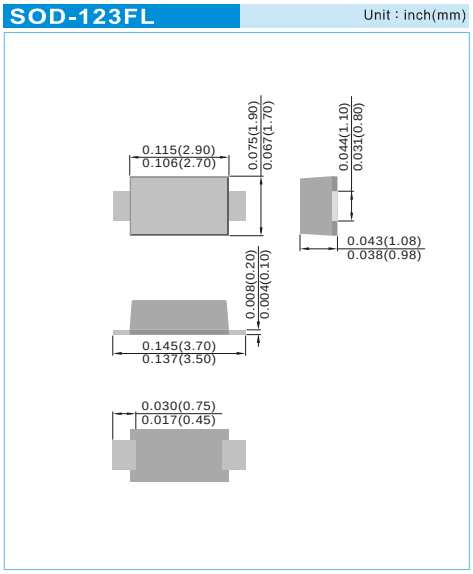
BZD27C3V6P~BZD27C75P

VOLTAGE REGULATOR DIODES

VOLTAGE 3.6 to 75 Volt **POWER** 1 W

SOD-123FL Unit : inch(mm)



FEATURES

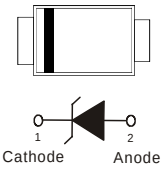
- Sillicon Planar Zener Diode
- Low profile surface-mount package
- Zener and surge current specification
- Low leakage current
- Excellent stability
- High temperature soldering : 260°C/10 sec. at terminals
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case: SOD-123FL

Terminals : Solderable per MIL-STD-750,Method 2026

Approx Weight: 0.0006 ounce, 0.017 gram



ABSOLUTE MAXIMUM RATINGS (T_A=25°C , unless otherwise specified)

Parameter	Test conditon	Symbol	Value	Units
Power dissipation	T_L=80°C T_A=25°C	P_{TOT} P_{TOT}	2.3 1 (note 1)	W
Non-repetitive peak pulse power dissipation	100 µs square pulse(note 2) 10/1000 µs waveform (BZD27-C7V5P to BZD27-75P)	P_{ZSM} P_{RSM}	300 150	W

THERMAL CHARACTERISTICS (T_A=25°C , unless otherwise noted)

Parameter	Symbol	Value	Unit
Typical thermal resistance junction to ambient	$R_{\theta JA}$	180	K/W
Typical thermal resistance junction to lead	$R_{\theta JL}$	30	K/W
Maximum junction temperature	T_J	150	°C
Storage temperature range	T_S	-55 to + 150	°C

ELCTRICAL CHARACTERISTICS

Parameter	Test condition	Symbol	Min	Typ	Max	Units
Forward voltage	I_F=0.2A	V_F	-	-	1.2	V

NOTES :

1. Mounted on epoxy-glass PCB with 3X3 mm Cu pads (≥40µm thick)
2. T_J=25°C prior to surge

BZD27C3V6P~BZD27C75P

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	$V_Z@I_{ZT}$			$Z_{ZT}@I_{ZT}$		$Z_{ZK}@I_{ZK}$		$I_R@V_R$		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
BZD27C3V6P	3.6	3.42	3.78	8	100	400	1	100	1	3V6
BZD27C3V9P	3.9	3.71	4.10	8	100	400	1	50	1	3V9
BZD27C4V3P	4.3	4.09	4.52	7	100	400	1	25	1	4V3
BZD27C4V7P	4.7	4.47	4.94	7	100	500	1	10	1	4V7
BZD27C5V1P	5.1	4.85	5.36	6	100	550	1	5	1	5V1
BZD27C5V6P	5.6	5.32	5.88	4	100	600	1	10	2	5V6
BZD27C6V0P	6.0	5.70	6.30	3	100	600	1	8	2	6V1
BZD27C6V2P	6.2	5.89	6.51	3	100	700	1	5	2	6V2
BZD27C6V8P	6.8	6.46	7.14	3	100	700	1	10	3	6V8
BZD27C7V5P	7.5	7.13	7.88	2	100	700	0.5	50	3	7V5
BZD27C8V2P	8.2	7.79	8.61	2	100	700	0.5	10	3	8V2
BZD27C8V7P	8.7	8.27	9.14	3	50	700	0.5	10	4	8V7
BZD27C9V1P	9.1	8.65	9.56	4	50	700	0.5	10	5	9V1
BZD27C10P	10	9.50	10.50	4	50	700	0.25	7	7.5	10P
BZD27C11P	11	10.45	11.55	7	50	700	0.25	4	8.2	11P
BZD27C12P	12	11.40	12.60	7	50	700	0.25	3	9.1	12P
BZD27C13P	13	12.35	13.65	10	50	700	0.25	2	10	13P
BZD27C14P	14	13.30	14.70	10	50	700	0.25	2	11	14P
BZD27C15P	15	14.25	15.75	10	50	700	0.25	1	11	15P
BZD27C16P	16	15.20	16.80	15	25	700	0.25	1	12	16P
BZD27C17P	17	16.15	17.85	15	25	750	0.25	1	13	17P
BZD27C18P	18	17.10	18.90	15	25	750	0.25	1	13	18P
BZD27C19P	19	18.05	19.95	15	25	750	0.25	1	14	19P
BZD27C20P	20	19.00	21.0	15	25	750	0.25	1	15	20P
BZD27C22P	22	20.90	23.10	15	25	750	0.25	1	16	22P
BZD27C24P	24	22.80	25.20	15	25	750	0.25	1	18	24P
BZD27C25P	25	23.75	26.25	15	25	750	0.25	1	19	25P
BZD27C27P	27	25.65	28.35	15	25	1000	0.25	1	20	27P
BZD27C28P	28	26.60	29.40	15	25	1000	0.25	1	21	28P
BZD27C30P	30	28.50	31.50	15	25	1000	0.25	1	22	30P
BZD27C33P	33	31.35	34.65	15	25	1000	0.25	1	24	33P
BZD27C36P	36	34.20	37.80	40	10	1000	0.25	1	27	36P
BZD27C39P	39	37.05	40.95	40	10	1000	0.25	1	30	39P
BZD27C43P	43	40.85	45.15	45	10	1500	0.25	1	33	43P
BZD27C47P	47	44.65	49.35	45	10	1500	0.25	1	36	47P
BZD27C51P	51	48.45	53.55	60	10	1500	0.25	1	39	51P
BZD27C56P	56	53.2	58.8	60	10	2000	0.25	1	43	56P
BZD27C62P	62	58.9	65.1	80	10	2000	0.25	1	47	62P
BZD72C68P	68	64.6	71.4	80	10	2000	0.25	1	51	68P
BZD27C75P	75	71.25	78.75	100	10	2000	0.25	1	56	75P

BZD27C3V6P~BZD27C75P

Typical Characteristics (T_A=25°C unless otherwise specified)

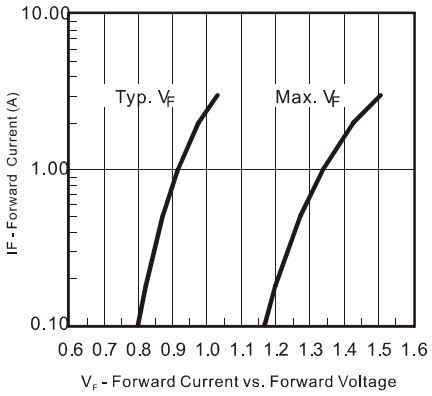


Figure1. Forward Current vs. Forward Voltage

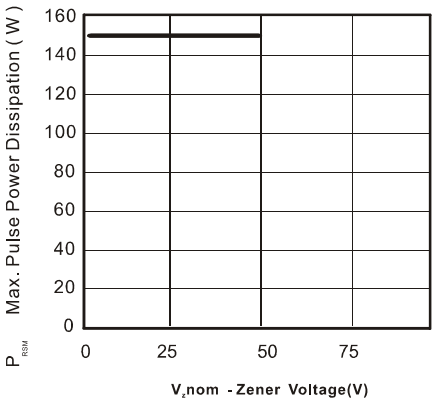


Figure4. Maximum Pulse Power Dissipation vs. Zener Voltage

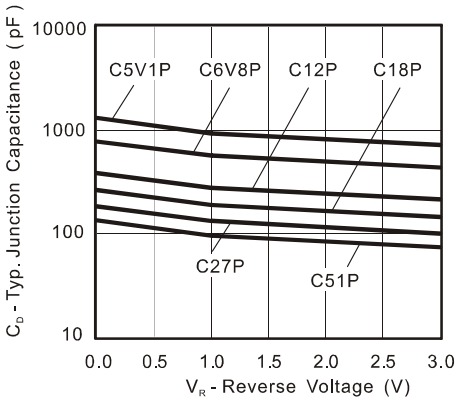


Figure2. Typ. Diode Capacitance vs. Reverse Voltage

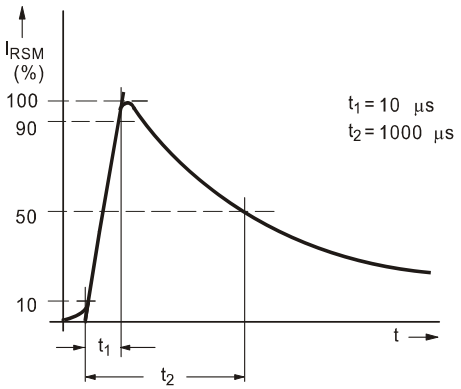


Figure5. Non-Repetitive Peak Reverse Current Pulse Definition

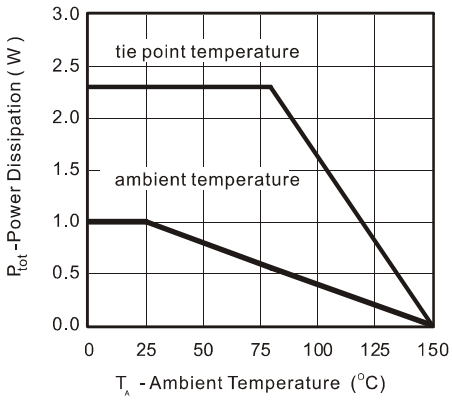
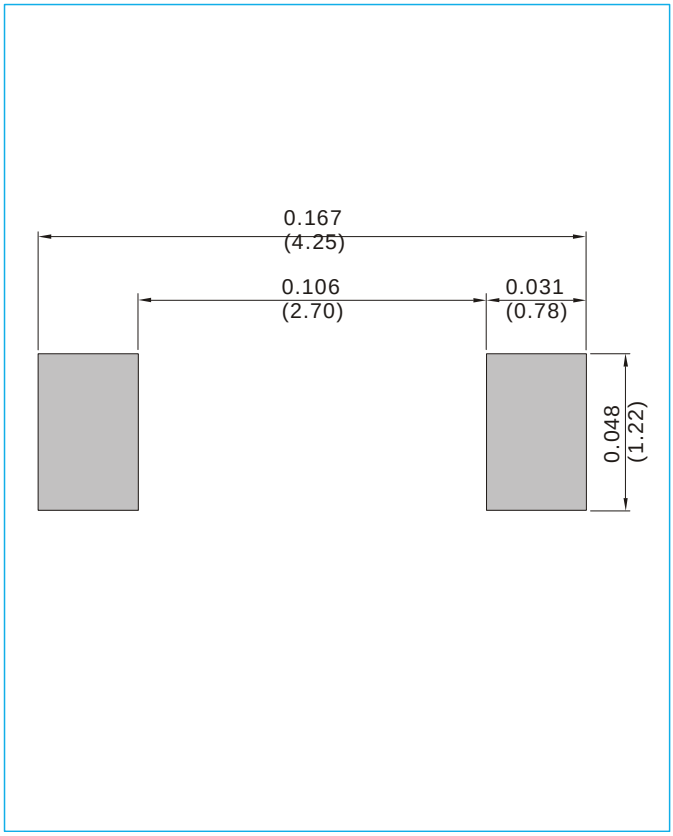


Figure3. Power Dissipation vs. Ambient Temperature

BZD27C3V6P~BZD27C75P

MOUNTING PAD LAYOUT

SOD-123FL Unit：inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

BZD27C3V6P~BZD27C75P

Part No_packing code_Version

BZD27C3V6P_R1_00001

BZD27C3V6P_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

BZD27C3V6P~BZD27C75P

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