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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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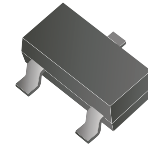
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ACZRT55C-G Series

RoHS Device



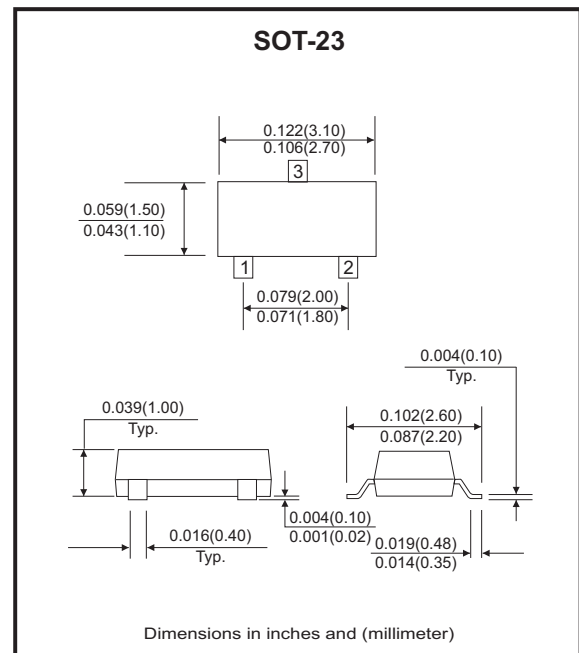
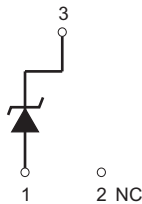
Features

- Planar Die Construction.
- Ideally Suited For Automated Assembly Processes.
- Comply with AEC-Q101

Mechanical data

- Case: Molded plastic, SOT-23
- Mounting position: Any

Circuit diagram



Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Forward voltage at I _F =10mA	V _F	0.9	V
Power dissipation	P _D	350	mW
Thermal resistance, junction to ambient air	R _{θJA}	500	°C/W
Junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-65 to +150	°C

Note: 1. Valid provided that device terminals are kept at ambient temperature.
 2. Tested with pulses, 300µs pulse width, period = 5ms.
 3. f = 1KHz.

Electrical Characteristics (TA=25°C unless otherwise noted)

Part Number	Zener Voltage			Maximum Zener Impedance			Maximum Reverse Current		Typ. Temp. Coefficient		Marking Code	
	VZT			@ IZT	ZZT@ IZT	Zzk	@ IZK	IR @ VR		@ IZT mV/°C		
	Nom(V)	Min(V)	Max(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	Min.		Max.
ACZRT55C2V4-G	2.4	2.2	2.6	5.0	100	600	1.0	50	1.0	-3.5	0	Z11
ACZRT55C2V7-G	2.7	2.5	2.9	5.0	100	600	1.0	20	1.0	-3.5	0	Z12
ACZRT55C3V0-G	3.0	2.8	3.2	5.0	95	600	1.0	10	1.0	-3.5	0	Z13
ACZRT55C3V3-G	3.3	3.1	3.5	5.0	95	600	1.0	5.0	1.0	-3.5	0	Z14
ACZRT55C3V6-G	3.6	3.4	3.8	5.0	90	600	1.0	5.0	1.0	-3.5	0	Z15
ACZRT55C3V9-G	3.9	3.7	4.1	5.0	90	600	1.0	3.0	1.0	-3.5	0	Z16
ACZRT55C4V3-G	4.3	4.0	4.6	5.0	90	600	1.0	3.0	1.0	-3.5	0	Z17
ACZRT55C4V6-G	4.6	4.3	4.9	5.0	90	600	1.0	3.0	1.0	-3.5	0	Z18
ACZRT55C4V7-G	4.7	4.4	5.0	5.0	80	500	1.0	3.0	2.0	-3.5	0.2	Z1
ACZRT55C5V1-G	5.1	4.8	5.4	5.0	60	480	1.0	2.0	2.0	-2.7	1.2	Z2
ACZRT55C5V6-G	5.6	5.2	6.0	5.0	40	400	1.0	1.0	2.0	-2.0	2.5	Z3
ACZRT55C6V2-G	6.2	5.8	6.6	5.0	10	150	1.0	3.0	4.0	0.4	3.7	Z4
ACZRT55C6V8-G	6.8	6.4	7.2	5.0	15	80	1.0	2.0	4.0	1.2	4.5	Z5
ACZRT55C7V5-G	7.5	7.0	7.9	5.0	15	80	1.0	1.0	5.0	2.5	5.3	Z6
ACZRT55C8V2-G	8.2	7.7	8.7	5.0	15	80	1.0	0.7	5.0	3.2	6.2	Z7
ACZRT55C9V1-G	9.1	8.5	9.6	5.0	15	100	1.0	0.5	6.0	3.8	7.0	Z8
ACZRT55C10-G	10	9.4	10.6	5.0	20	150	1.0	0.2	7.0	4.5	8.0	Z9
ACZRT55C11-G	11	10.4	11.6	5.0	20	150	1.0	0.1	8.0	5.4	9.0	Y1
ACZRT55C12-G	12	11.4	12.7	5.0	25	150	1.0	0.1	8.0	6.0	10.0	Y2
ACZRT55C13-G	13	12.4	14.1	5.0	30	170	1.0	0.1	8.0	7.0	11.0	Y3
ACZRT55C15-G	15	13.8	15.6	5.0	30	200	1.0	0.1	10.5	9.2	13.0	Y4
ACZRT55C16-G	16	15.3	17.1	5.0	40	200	1.0	0.1	11.2	10.4	14.0	Y5
ACZRT55C18-G	18	16.8	19.1	5.0	45	225	1.0	0.1	12.6	12.4	16.0	Y6
ACZRT55C20-G	20	18.8	21.2	5.0	55	225	1.0	0.1	14.0	14.4	18.0	Y7
ACZRT55C22-G	22	20.8	23.3	5.0	55	250	1.0	0.1	15.4	16.4	20.0	Y8
ACZRT55C24-G	24	22.8	25.6	5.0	70	250	1.0	0.1	16.8	18.4	22.0	Y9
ACZRT55C27-G	27	25.1	28.9	2.0	80	300	0.5	0.1	18.9	21.4	25.3	Y10

Company reserves the right to improve product design , functions and reliability without notice.

REV: B

Electrical Characteristics (TA=25°C unless otherwise noted)

Part Number	Zener Voltage			Maximum Zener Impedance			Maximum Reverse Current		Typ. Temp. Coefficient		Marking Code	
	V _{ZT}			@ I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK}	@ I _{ZK}	I _R @ V _R		@ I _{ZT} mV/°C		
	Nom(V)	Min(V)	Max(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	Min.		Max.
ACZRT55C30-G	30	28.0	32.0	2.0	80	300	0.5	0.1	21.0	24.4	29.4	Y11
ACZRT55C33-G	33	31.0	35.0	2.0	80	325	0.5	0.1	23.1	27.4	33.4	Y12
ACZRT55C36-G	36	34.0	38.0	2.0	90	350	0.5	0.1	25.2	30.4	37.4	Y13
ACZRT55C39-G	39	37.0	41.0	2.0	130	350	0.5	0.1	27.3	33.4	41.2	Y14
ACZRT55C43-G	43	40.0	46.0	2.0	150	375	0.5	0.1	30.1	10.0	12.0	Y15
ACZRT55C47-G	47	44.0	50.0	2.0	170	375	0.5	0.1	32.9	10.0	12.0	Y16
ACZRT55C51-G	51	48.0	54.0	2.0	180	400	0.5	0.1	35.7	10.0	12.0	Y17
ACZRT55C56-G	56	52.0	60.0	2.0	200	425	0.5	0.05	39.2	10.0	12.0	Y18
ACZRT55C62-G	62	58.0	66.0	2.0	215	450	0.5	0.05	43.4	10.0	12.0	Y19
ACZRT55C68-G	68	64.0	72.0	2.0	240	475	0.5	0.05	47.6	10.0	12.0	Y20
ACZRT55C75-G	75	70.0	79.0	2.0	255	500	0.5	0.05	52.5	10.0	12.0	Y21

TYPICAL RATING AND CHARACTERISTIC CURVES (ACZRT55C-G Series)

Fig.1 - Power Derating Curve

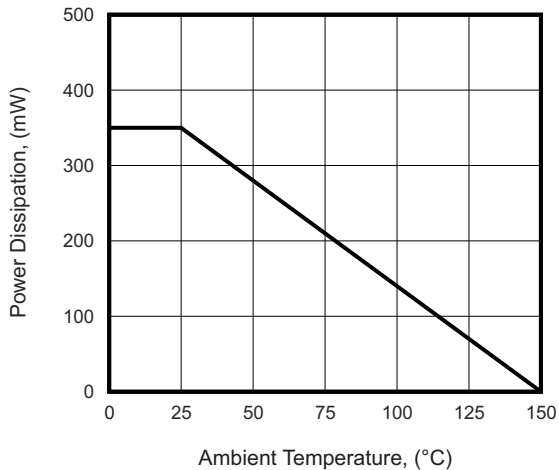


Fig.2 - Zener Breakdown Characteristics

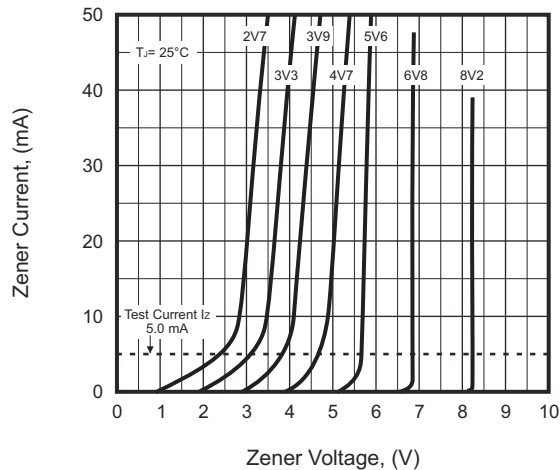


Fig.3 - Zener Breakdown Characteristics

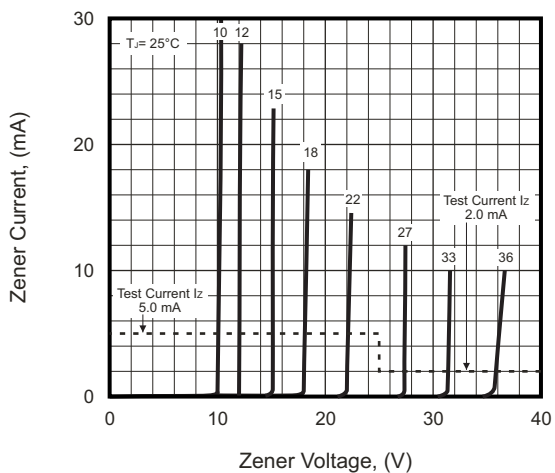
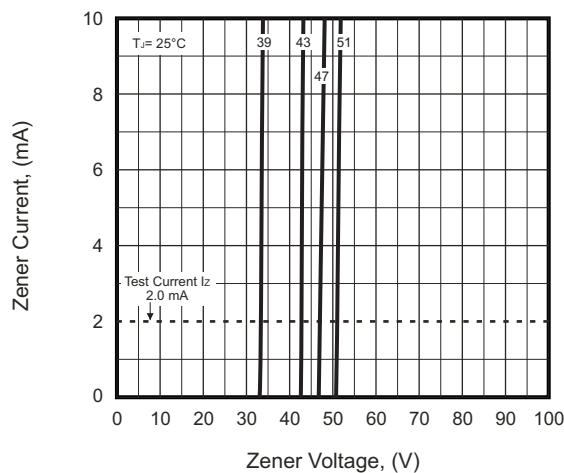
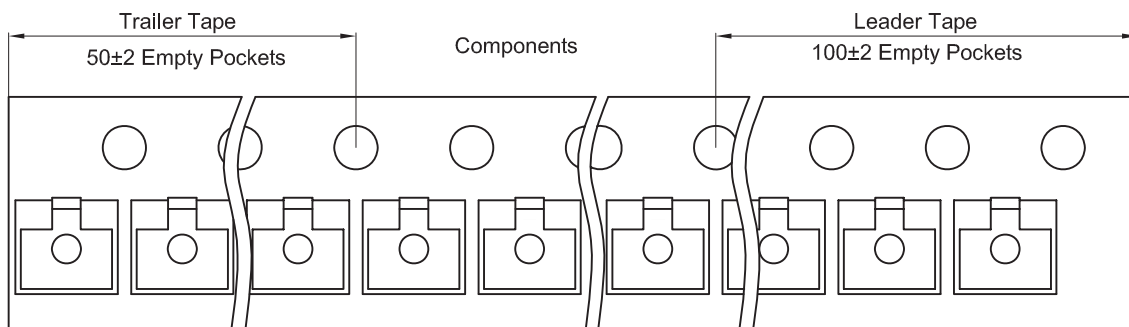
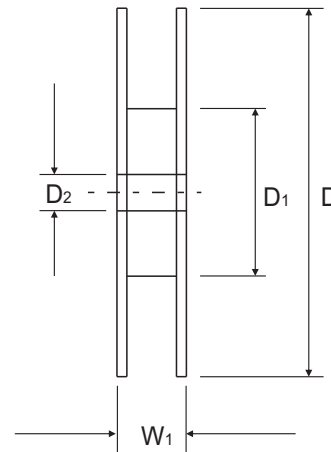
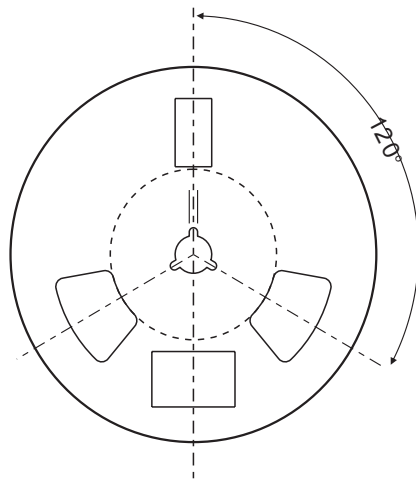
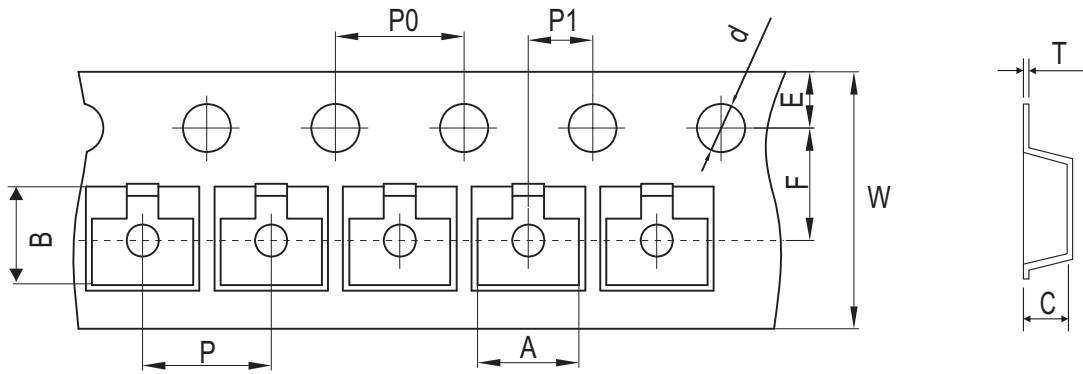


Fig.4 - Zener Breakdown Characteristics



Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 + 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 + 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

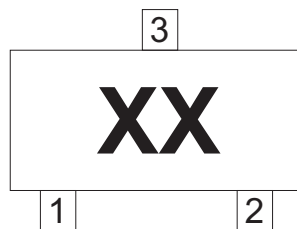
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 / - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.002	0.315 + 0.012 / - 0.004	0.374 ± 0.039

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REV: B

Marking Code

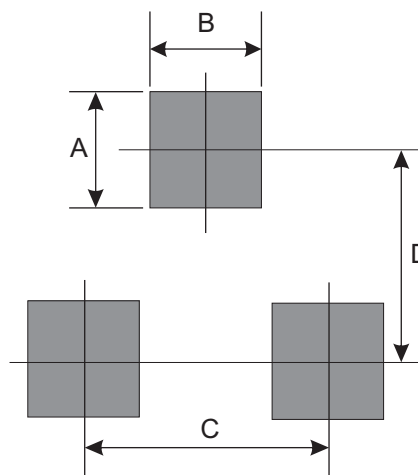
Part Number	Marking Code
ACZRT55C-G Series	See Page 2 ~ 3



XX/XXX = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.90	0.035
B	0.80	0.031
C	1.90	0.075
D	2.00	0.079



Note:

1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7