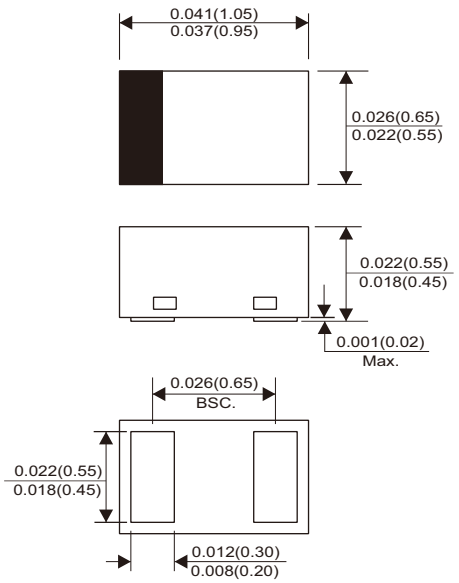
ACDBQC0130L-HF

Io = 100 mA
VR = 30 Volts
RoHS Device
Halogen Free

0402C/SOD-923F



Dimensions in inches and (millimeter)

Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin package.
- Majority carrier conduction.
- AEC-Q101 Qualified

Mechanical data

- Case: 0402C/SOD-923F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any
- Weight: 0.001 grams (approx.).

Circuit Diagram

Maximum Rating (at T_A=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V_{RRM}			35	V
Reverse voltage		V_R			30	V
Average forward rectified current		I_O			100	mA
Peak forward surge current	8.3 ms single half sine-wave (1 cyc)	I_{FSM}			3	A
Thermal resistance	Junction to ambient	$R_{\theta JA}$		200		°C/W
Junction temperature range		T_j	-40		+125	°C
Storage temperature range		T_{STG}	-40		+125	°C

Electrical Characteristics (at T_A=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 10mA	V_F		0.25	0.30	V
Reverse current	V_R = 10V	I_R			10	μA
Capacitance between terminals	V_R = 1V, f = 1 MHz	C_T		14	20	pF

Rating and Characteristic Curves (ACDBQC0130L-HF)

Fig.1 - Forward Characteristics

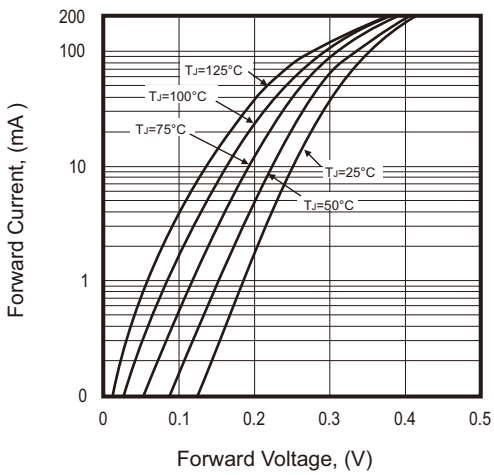


Fig.2 - Reverse Characteristics

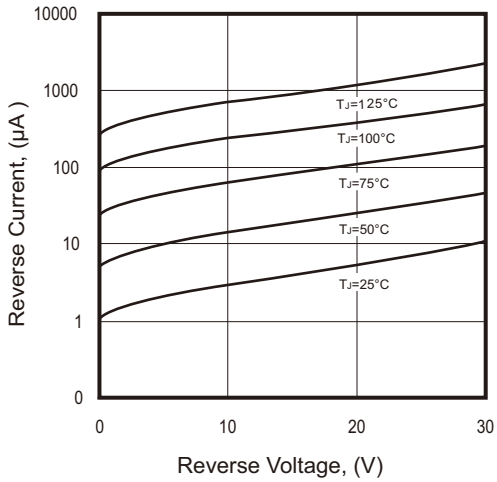


Fig.3 - Typical Capacitance Between Terminals Characteristics

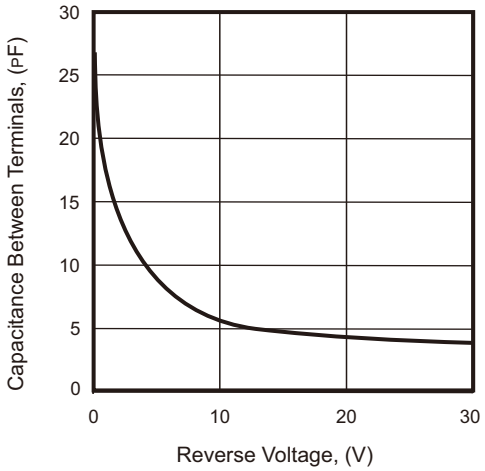
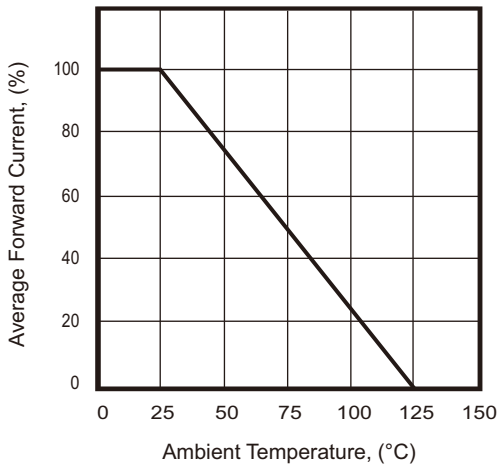
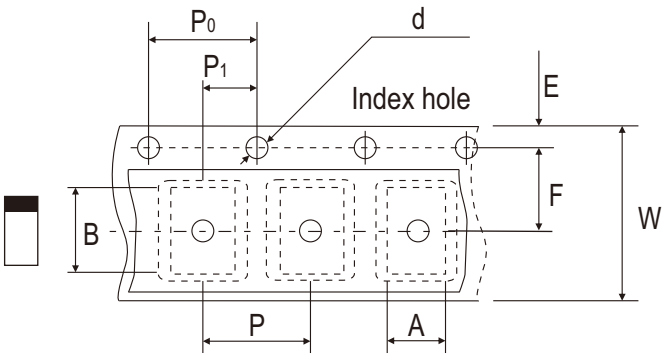
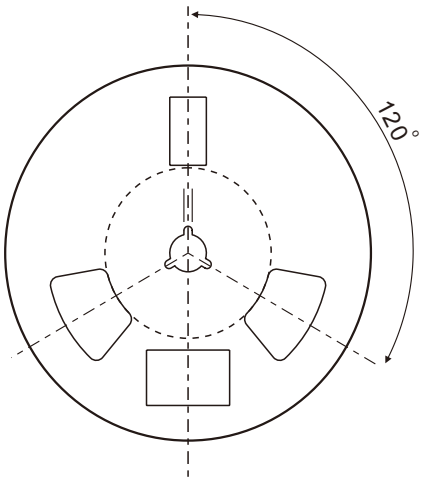


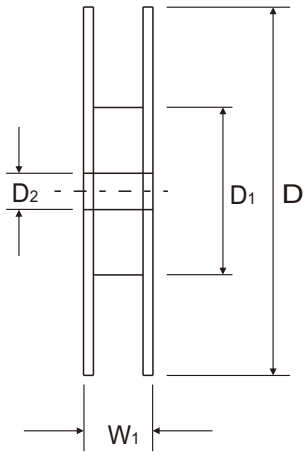
Fig.4 - Current Derating Curve

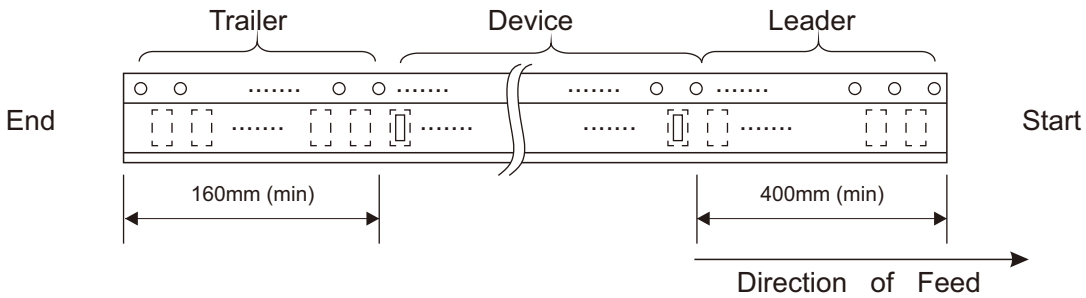


Reel Taping Specification









	SYMBOL	A	B	C	d	D	D1	D2
0402C (SOD-923F)	(mm)	0.75 ± 0.05	1.17 ± 0.05	0.65 ± 0.05	1.50 + 0.10 - 0.00	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.030 ± 0.002	0.046 ± 0.002	0.026 ± 0.002	0.059 + 0.004 - 0.000	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

	SYMBOL	E	F	P	P0	P1	T	W	W1
0402C (SOD-923F)	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.20 + 0.02 - 0.05	8.00 ± 0.20	12.00 + 0.50 - 0.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.008 + 0.001 - 0.002	0.315 ± 0.008	0.472 + 0.020 - 0.000