

CDSV3-16-G/56-G/70-G/99-G

Reverse Voltage: 75 Volts
Forward Current: 300 mA
RoHS Device



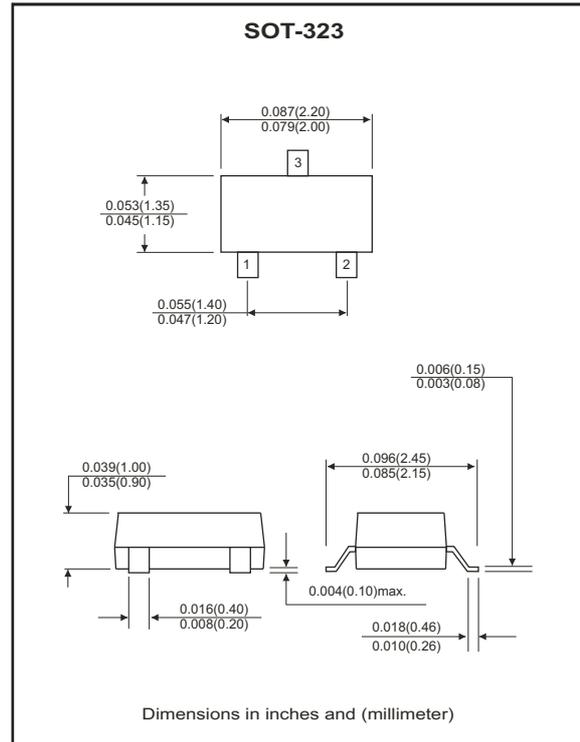
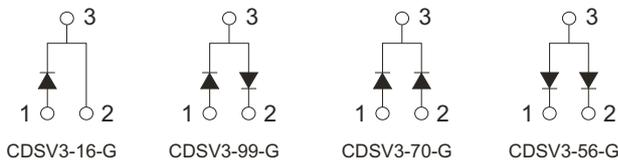
Features

- Design for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.006 grams

Circuit diagram



Maximum Ratings and Electrical Characteristics

(at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Value	Units
Repetitive peak reverse voltage	V _{RRM}		75	V
Reverse voltage	V _R		75	V
Forward current	I _F		300	mA
Peak surge forward current	I _{FSM}	T=1.0 μS	2	A
Power dissipation	P _d		200	mW
Maximum forward voltage	V _F	@I _F =1mA @I _F =10mA @I _F =50mA @I _F =150mA	0.715 0.855 1.0 1.25	V
Maximum reverse current	I _R	@V _R =20V @V _R =75V @V _R =25V, T _J =150 °C @V _R =75V, T _J =150 °C	0.025 2.5 30 50	μA
Maximum reverse recovery time	T _{rr}	I _F =10mA, V _R =6V	4	nS
Typical diode capacitance	C _J	V _R =0V, f=1.0MHz	2	pF
Maximum junction temperature	T _J		-65~+150	°C
Storage temperature	T _{STG}		-65 to +150	°C

RATING AND CHARACTERISTIC CURVES (CDSV3-16-G/56-G/70-G/99-G)

Fig.1 - Forward Characteristics

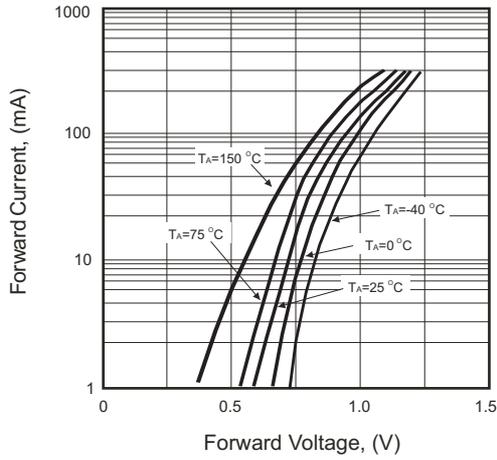


Fig.2 - Typical Reverse Characteristics

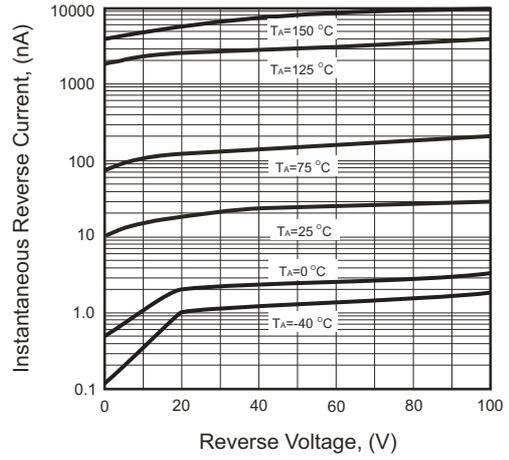


Fig.3 - Typical Capacitance vs. Reverse Voltage

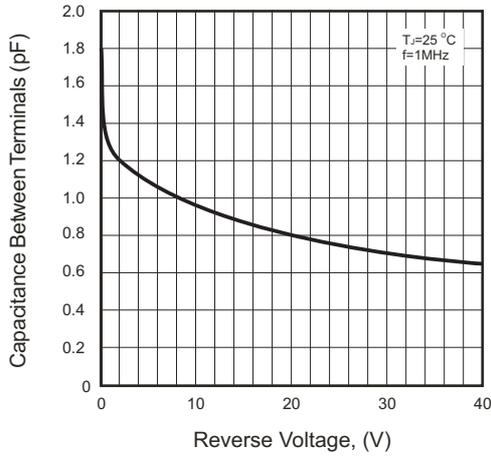


Fig.4 - Reverse Recovery Time vs. Forward Current

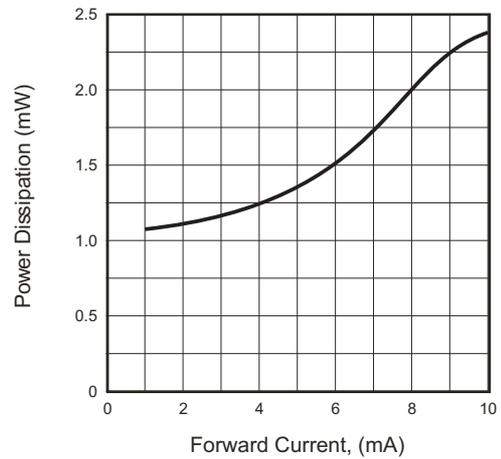
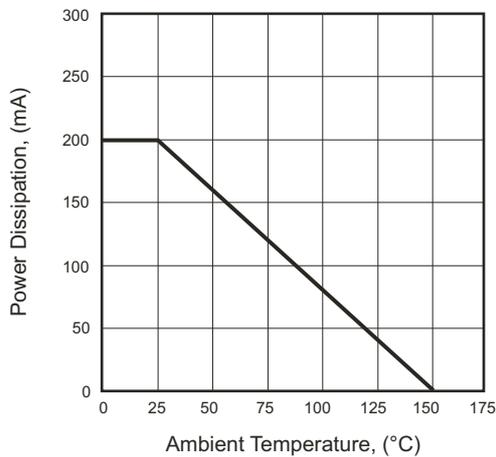
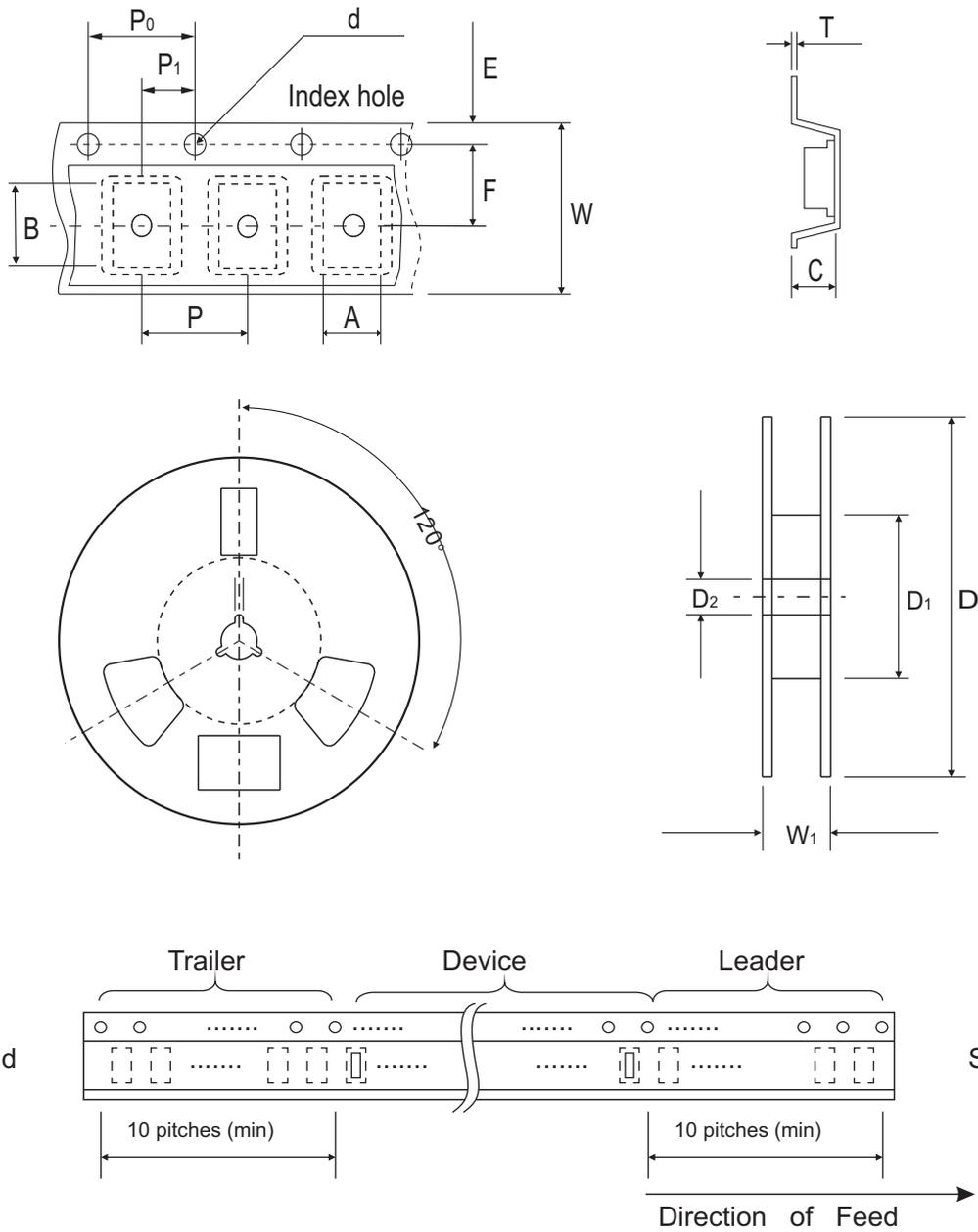


Fig.5 - Power Derating Curve, Total Package



Reel Taping Specification

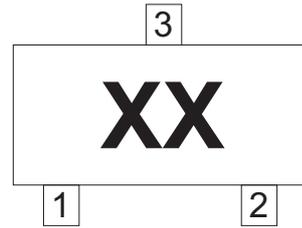


SOT-323	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.10	2.55 ± 0.10	1.19 ± 0.10	1.55 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.0 ± 0.20
	(inch)	0.089 ± 0.004	0.100 ± 0.004	0.047 ± 0.004	0.061 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SOT-323	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 ± 0.10	$8.00 + 0.30 / - 0.10$	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.004	$0.315 + 0.012 / - 0.004$	0.374 ± 0.039

Marking Code

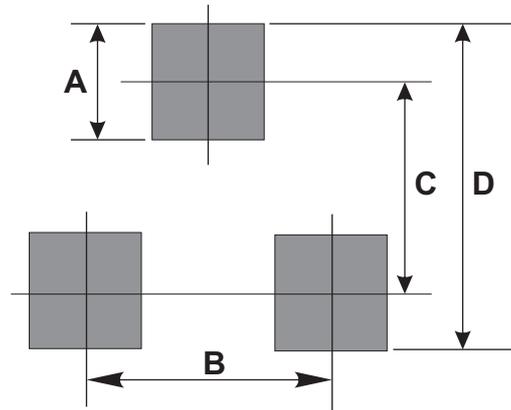
Part Number	Marking Code
CDBV3-16-G	A2
CDBV3-56-G	KJC
CDBV3-70-G	KJA
CDBV3-99-G	KJG



xx/xxx = Product type marking code

Suggested PAD Layout

SIZE	SOT-323	
	(mm)	(inch)
A	0.80	0.031
B	1.30	0.051
C	1.94	0.076
D	2.74	0.108



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-323	3,000	7

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