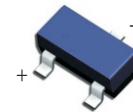


CDST-4448-G High Speed RoHS Device

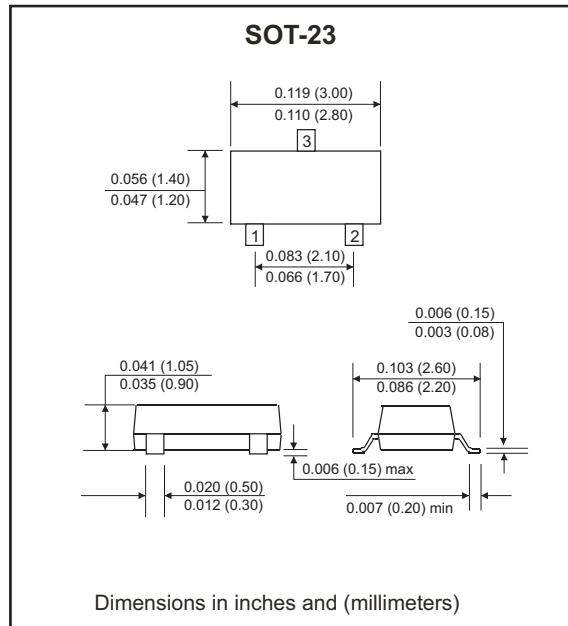
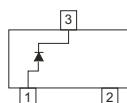


Features

- Fast switching diode.
- Surface mount package ideally suited for automatic insertion.
- For general purpose switching applications.
- High conductance.

Mechanical data

- Case: SOT-23
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.
- Weight: 0.008 grams(approx.).



Maximum Rating (at $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	V_{RM}	100	V
Peak repetitive peak reverse voltage	V_{RRM}		
Working peak reverse voltage	V_{RWPM}	75	V
DC blocking voltage	V_R		
RMS reverse voltage	$V_{R(RMS)}$	53	V
Forward continuous current	I_{FM}	500	mA
Average rectified output current	I_o	250	mA
Peak forward surge current @1μS @1.0S	I_{FSM}	4.0 2.0	A
Power dissipation	P_D	350	mW
Thermal resistance-Junction to ambient air	$R_{θJA}$	357	°C/W
Storage temperature range	T_{STG}	-65 ~ +150	°C

Electrical Characteristics (at $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Max	Unit
Forward voltage	V_{F1} V_{F2} V_{F3} V_{F4}	$I_{F1}=5\text{mA}$ $I_{F2}=10\text{mA}$ $I_{F3}=100\text{mA}$ $I_{F4}=150\text{mA}$	0.62	0.72 0.855 1.0 1.25	V
Reverse current	I_{R1} I_{R2}	$V_{R1}=75\text{V}$ $V_{R2}=20\text{V}$		2.5 25	μA nA
Capacitance between terminals	C_T	$V_R=0\text{V}$, $f=1\text{MHz}$		4	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$		4	nS

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

REV:B

SMD Switching Diode

Comchip
SMD Diode Specialist

Characteristic Curves (CDST-4448-G)

Fig.1 - Forward Characteristics

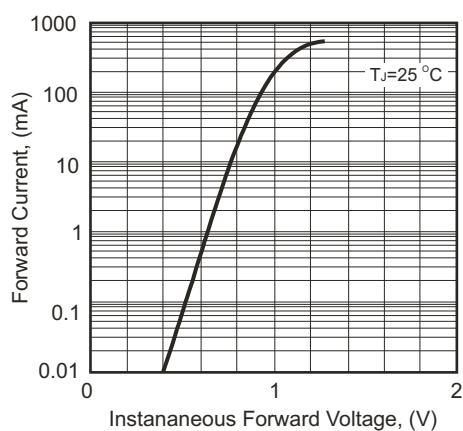
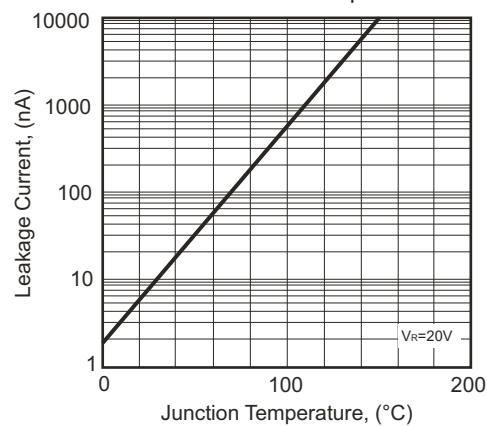
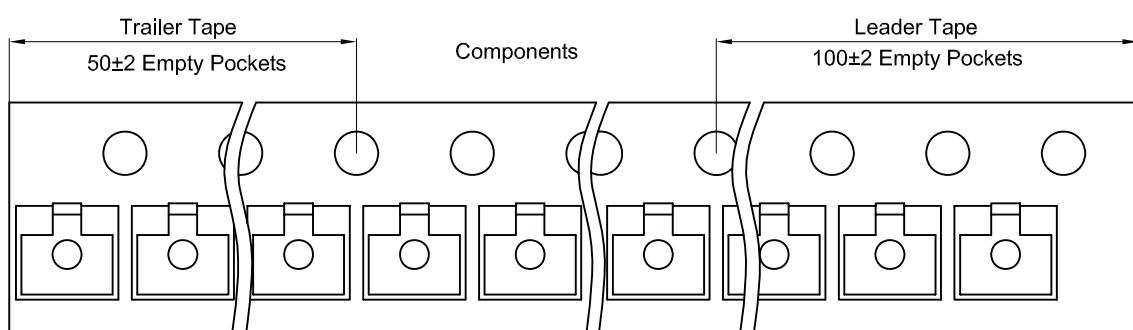
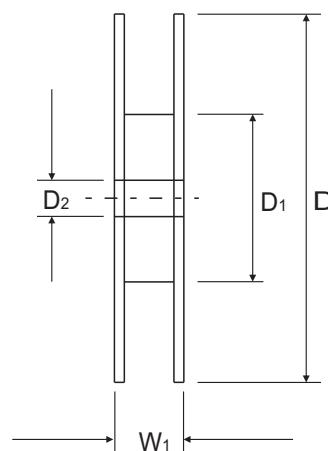
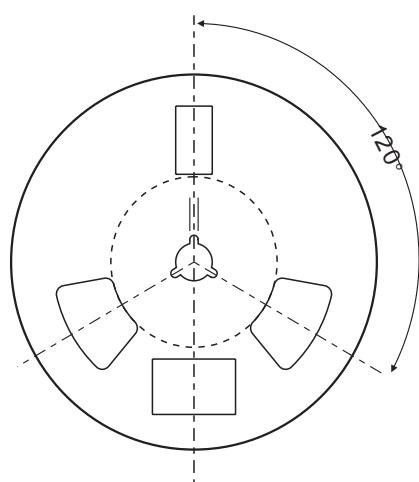
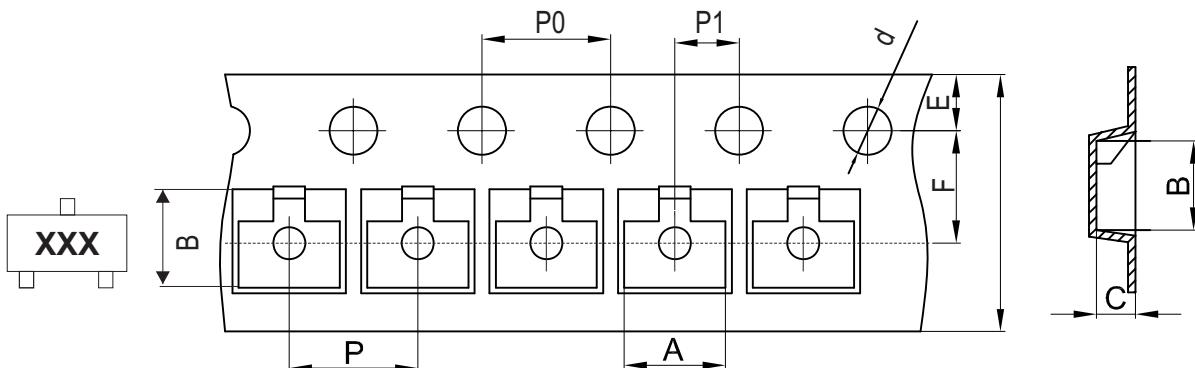


Fig.2 - Leakage Current vs Junction Temperature



Reel Taping Specification

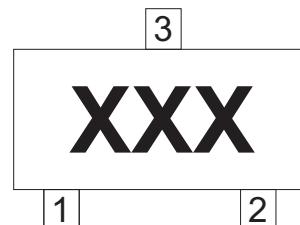


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	$8.00 \pm 0.30 / -0.10$	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	$0.315 \pm 0.012 / -0.004$	0.484 ± 0.039

Marking Code

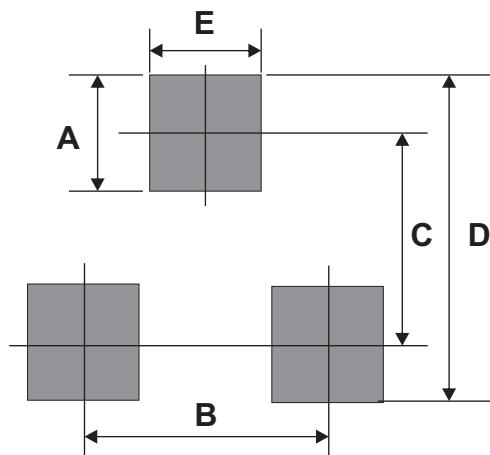
Part Number	Marking Code
CDST-4448-G	KA3



xx = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.80	0.031
B	1.90	0.075
C	2.02	0.080
D	2.82	0.111
E	0.80	0.031



Standard Packaging

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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Diodes - General Purpose, Power, Switching category:

Click to view products by Comchip manufacturer:

Other Similar products are found below :

[RD0306T-H](#) [BAV17-TR](#) [BAV19-TR](#) [1N3611](#) [NTE156A](#) [NTE525](#) [NTE571](#) [NTE5804](#) [NTE5806](#) [NTE6244](#) [1SS181-TP](#) [1SS193,LF](#)
[1SS400CST2RA](#) [SDAA13](#) [SHN2D02FUTW1T1G](#) [LS4151GS08](#) [1N4449](#) [1N456A](#) [1N4934-E3/73](#) [1N914B](#) [1N914BTR](#) [RFUH20TB3S](#)
[BAS 28 E6327](#) [BAV199-TP](#) [BAW56DWQ-7-F](#) [BAW75-TAP](#) [MM230L-CAA](#) [IDW40E65D1](#) [JAN1N3600](#) [LL4151-GS18](#) [053684A](#)
[SMMSD4148T3G](#) [707803H](#) [NSVDAN222T1G](#) [SP000010217](#) [CDSZC01100-HF](#) [BAV199E6433HTMA1](#) [BAV70M3T5G](#) [SMBT2001T1G](#)
[NTE5801](#) [NTE5800](#) [NTE5808](#) [NTE6240](#) [NTE6248](#) [DLM10C-AT1](#) [BAS28-7](#) [BAW56HDW-13](#) [BAS28 TR](#) [VS-HFA04SD60STR-M3](#)
[NSVM1MA152WKT1G](#)