

## CDST4448-G

### High Speed

### RoHS Device

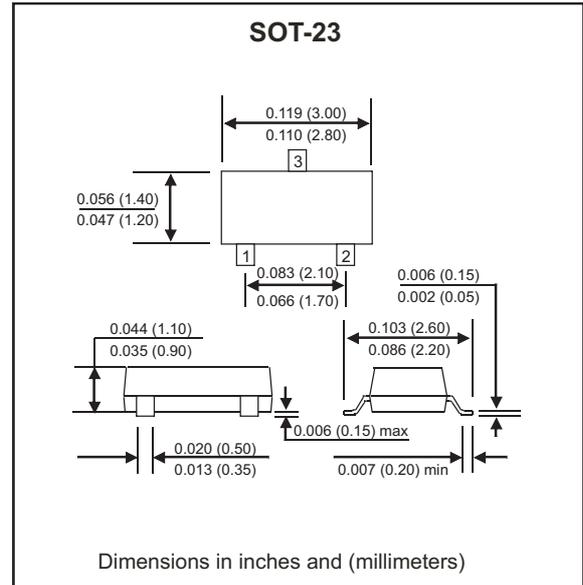


### Features

- 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 gram.
- Marking: KA3



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

Parameter	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	$V_{RM}$	100	V
Peak repetitive peak reverse voltage	$V_{RRM}$	75	V
Working peak reverse voltage	$V_{RWM}$		
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	$I_{FSM}$	4.0 2.0	A
	@1 $\mu$ S @1.0S		
Power dissipation	$P_d$	350	mW
Thermal resistance-Junction to ambient air	$R_{\theta JA}$	357	°C/W
Storage temperature range	$T_{STG}$	-65 ~ +150	°C

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

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

## Characteristic Curves (CDST4448-G)

Fig.1 - Forward Characteristics

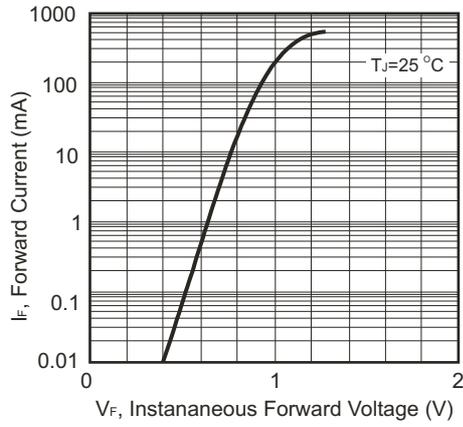


Fig.2 - Leakage Current vs Junction Temperature

