

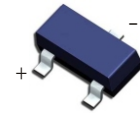
# SMD Switching Diode



SMD Diodes Specialist

## 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.

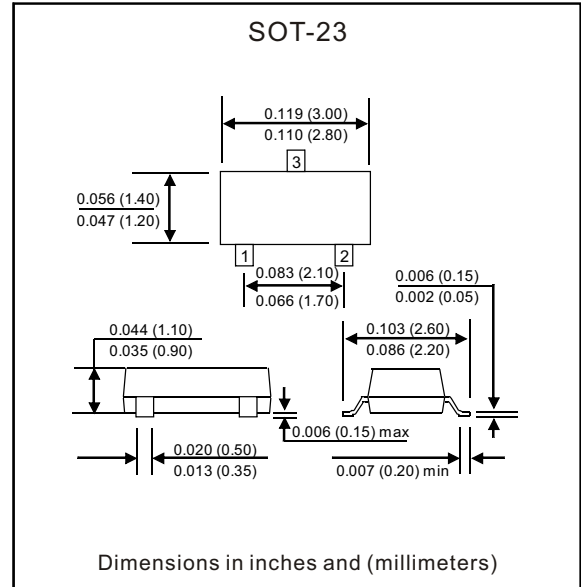
### Mechanical data

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 Working peak reverse voltage DC blocking voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
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 @1 $\mu$ S @1.0S	$I_{FSM}$	4.0 2.0	A
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	$V_{F1}$ $V_{F2}$ $V_{F3}$ $V_{F4}$	$I_{F1}=5mA$ $I_{F2}=10mA$ $I_{F3}=100mA$ $I_{F4}=150mA$	0.62	0.72 0.855 1.0 1.25	V
Reverse current	$I_{R1}$ $I_{R2}$	$V_{R1}=75V$ $V_{R2}=20V$		2.5 25	$\mu$ A 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

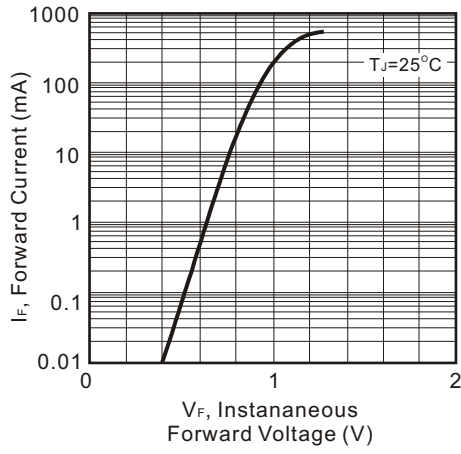


Fig. 2 - Leakage Current vs Junction Temperature

