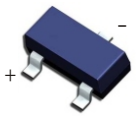
SMD Switching Diode

COMCHIP
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

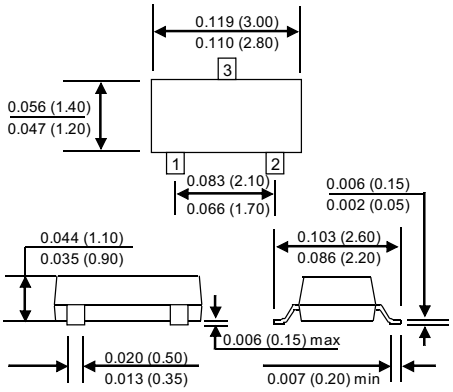
Case: SOT-23

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.

Weight: 0.008 gram.

Marking: KA3

SOT-23



Dimensions in inches and (millimeters)

Maximum Rating (at T_A=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 @1μS @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 T_A=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	μA nA
Capacitance between terminals	C_T	V_R=0V, f=1MHz		4	pF
Reverse recovery time	t_{rr}	I_F=I_R=10mA, Irr=0.1I_R, R_L=100Ω		4	nS

Characteristic Curves (CDST4448-G)

Fig. 1 - Forward Characteristics

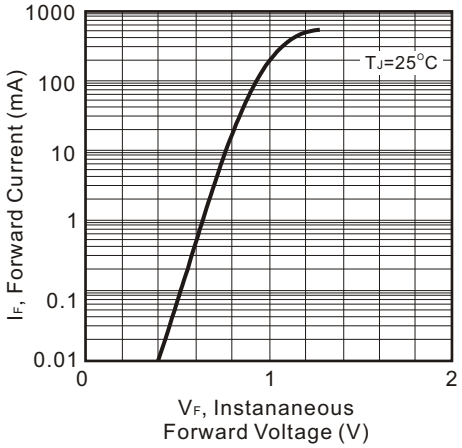


Fig. 2 - Leakage Current vs Junction Temperature

