

CDSH6-4448-G

High Speed
RoHS Device

Features

- Fast Switching Speed
- For general purpose switching applications.
- High conductance.

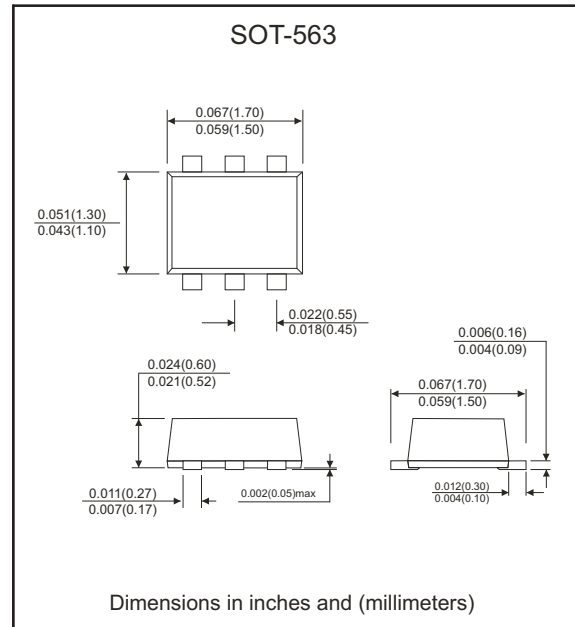
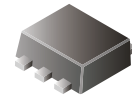
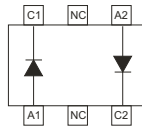
Mechanical data

Case: SOT-563, Molded Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Marking: KAL

Circuit diagram



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

Parameter	Symbol	Max	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	80	V
RMS reverse voltage	$V_{R(RMS)}$	57	V
Forward continuous current	I_{FM}	500	mA
Averaged rectified output current	I_o	250	mA
Peak forward surge current @t=1.0µs @T=1.0s	I_{FSM}	4 2	A
Power dissipation	P_D	150	mW
Thermal resistance, junction to air	$R_{\theta JA}$	833	°C/W
Junction temperature	T_J	150	°C
Storage temperature	T_{STG}	-65 to +150	°C

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

Parameter	Conditions	Symbol	Min	Max	Unit
Reverse breakdown voltage	$I_R=2.5\mu A$	V_{BR}	80		V
Reverse voltage leakage current	$V_R=70V$ $V_R=20V$	I_R		0.1 25	µA nA
Forward voltage	$I_F=5mA$ $I_F=10mA$ $I_F=100mA$ $I_F=150mA$	V_F	0.62	0.72 0.855 1 1.25	V
Diode capacitance	$V_R=6V, f=1MHz$	C_T		3.5	pF
Reverse recovery time	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}		4	nS

Typical Characteristics (CDSH6-4448-G)

Fig.1 Forward Power Derating Curve

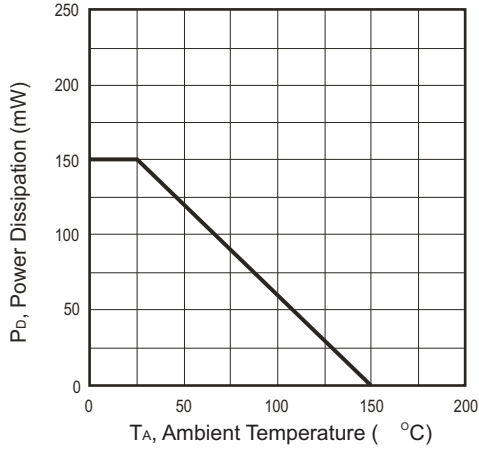


Fig.2 Typical Forward Characteristics

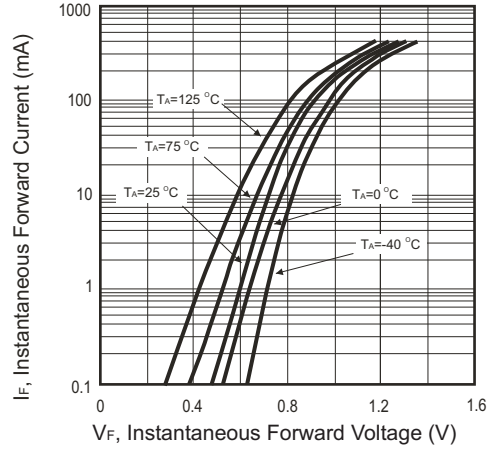


Fig.3 Typical Diode Capacitance Characteristics

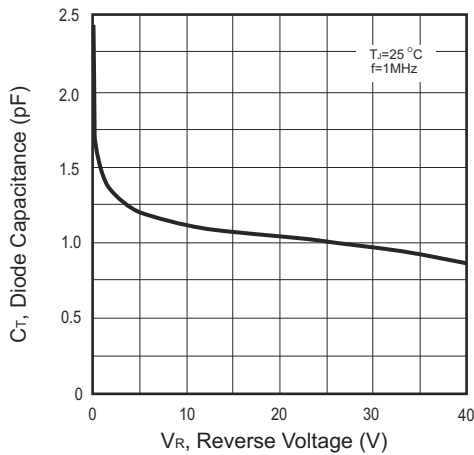


Fig.4 Typical Reverse Current Characteristics

