

Photovoltaic

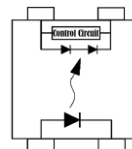
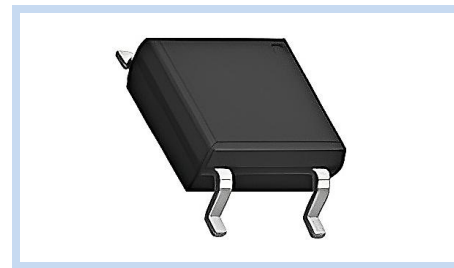
1CH 2.5KViso 8V 8uA SOP-4

PVD1258V008S4

MERITEK

FEATURE

- Isolated Floating Output
- Isolation Voltage: 2500 Vrms
- High-Speed Switching
- Integrated Turn-Off Circuitry
- Application: MOSFET Driver, Programmable Controller, Process Control, Solid State Relay, Isolated Switching, Isolated Power Supply
- In Accordance with Safety Class UL1577 Standard



MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Input Forward Current	I_F	50	mA
Input Peak Forward Current	I_{FP}	1	A
Input Reverse Voltage	V_R	5	V
Input Power Dissipation	P_I	75	mW
Isolation Voltage	V_{ISO}	2500	V_{RMS}
Operating Temperature Range	T_{Opr}	-40~+85	°C
Storage Temperature Range	T_{Stg}	-40~+100	°C

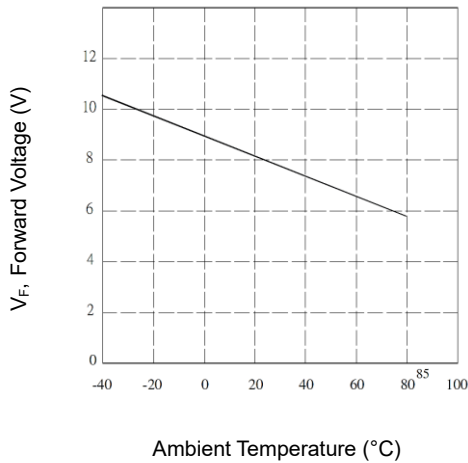
ELECTRICAL CHARACTERISTICS

Input Characteristics	Conditions	Symbol	Min	Typ.	Max	Unit
Forward Voltage	$I_F=10mA$	V_F	--	1.3	1.4	V
Operation LED Current	$V_{OC}=5V$	$I_{F,on}$	--	0.50	3.00	mA
Recovery LED Current	$V_{OC}=1V$	$I_{F,off}$	--	0.35	0.50	mA
Output Characteristics	Conditions	Symbol	Min	Typ.	Max	Unit
Short Circuit Current	$I_F=10mA$	I_{SC}	3	8	--	μA
Open Circuit Voltage	$I_F=10mA$	V_{OC}	6	8	--	V
Coupled Characteristics	Conditions	Symbol	Min	Typ.	Max	Unit
Resistance from Input to Output	$V_{IO}=500V_{DC}$	R_{IO}	10^{10}	--	--	Ω
Capacitance from Input to Output	$f=1MHz$	C_{IO}	--	0.8	1.5	pF
Turn-On Time	$I_F=10mA, C_L=1000pF$	t_{on}	--	0.23	--	ms
Turn-Off Time		t_{off}	--	0.03	--	

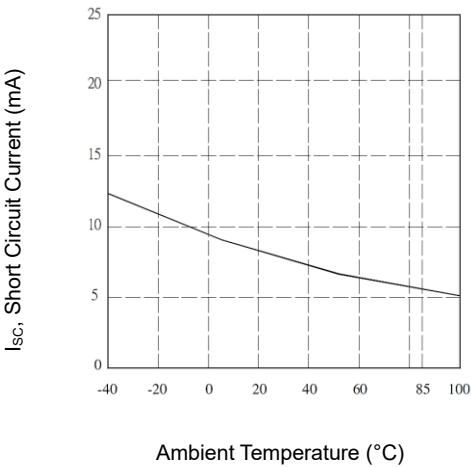
Note: $T_A=25^{\circ}C$ unless otherwise noted.

CHARACTERISTIC CURVES

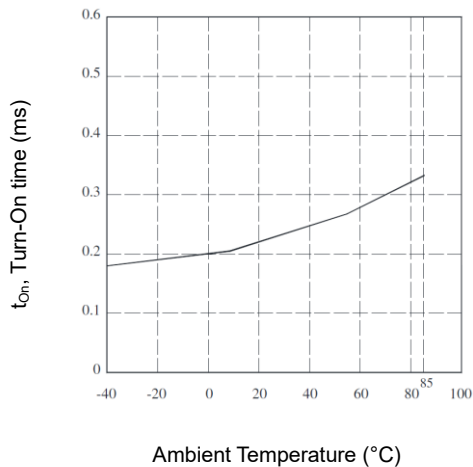
Forward Voltage vs. Temperature



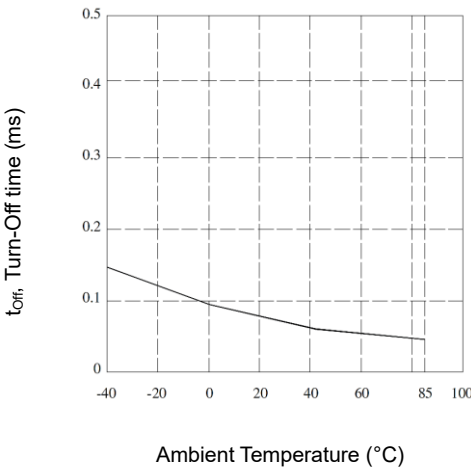
Short Circuit Current vs Temperature



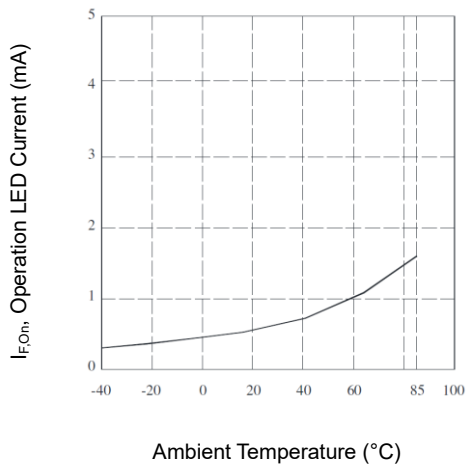
Turn-On Time vs. Temperature



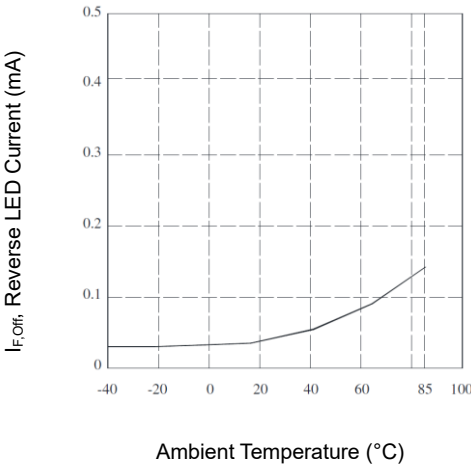
Turn-Off Time vs. Temperature



Operation LED Current vs. Temperature

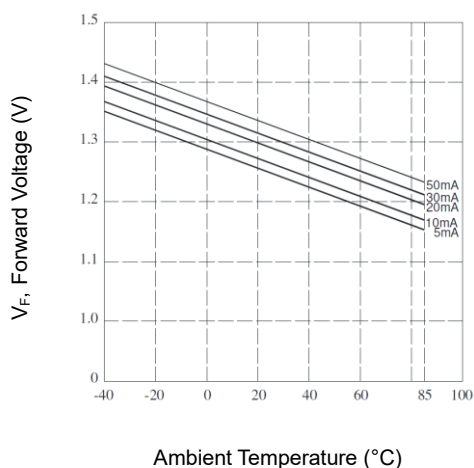


Recovery LED Current vs. Temperature

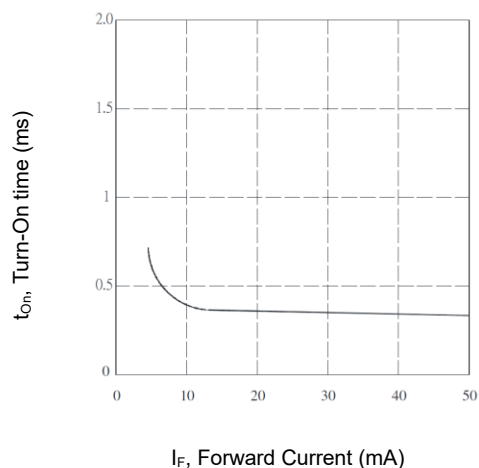


CHARACTERISTIC CURVES

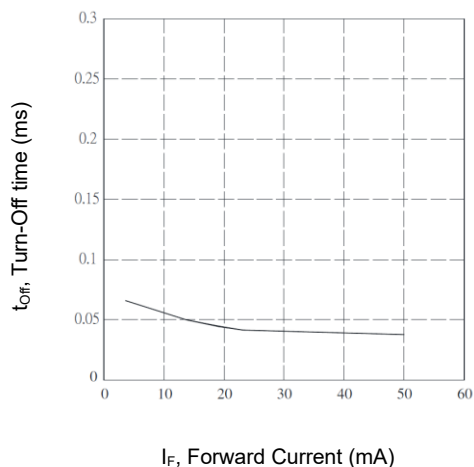
Forward Voltage vs. Temperature



Turn-On Time vs. Forward Current



Turn-Off Time vs. Forward Current



DIMENSIONS

Item	Min (mm)	Max (mm)
A1	0.00	0.20
A2	1.80	2.20
b	0.30	0.50
D	4.10	4.50
e	2.54	
E	6.40	7.20
E1	4.20	4.60
L	0.46	0.86
X	0.80	
X1	2.54	
Y	1.20	
Y1	7.20	
Z	0.93	

Note:

1.LED Anode;2.LED Cathode; 3.Cathode; 4 Anode

