



ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
INPUT				
LED continuous forward current		I_F	50	mA
LED reverse voltage	$I_R \leq 10\text{ }\mu\text{A}$	V_R	6	V
OUTPUT				
DC or peak AC load voltage	$I_L \leq 50\text{ }\mu\text{A}$	V_L	350	V
Continuous DC load current		I_L	120	mA
SSR				
Ambient temperature range		T_{amb}	- 40 to + 85	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 40 to + 125	$^{\circ}\text{C}$
Soldering temperature ⁽¹⁾	$t = 10\text{ s max.}$	T_{sld}	260	$^{\circ}\text{C}$
Isolation test voltage	$t = 1\text{ s}$	V_{ISO}	3000	V_{RMS}
Isolation resistance	$V_{IO} = 500\text{ V}, T_{amb} = 25\text{ }^{\circ}\text{C}$	R_{IO}	$\geq 10^{12}$	Ω
	$V_{IO} = 500\text{ V}, T_{amb} = 100\text{ }^{\circ}\text{C}$	R_{IO}	$\geq 10^{11}$	Ω
Total power dissipation		P_{tot}	600	mW

Notes

- Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. Functional operation of the device is not implied at these or any other conditions in excess of those given in the operational sections of this document. Exposure to absolute maximum ratings for extended periods of the time can adversely affect reliability.

⁽¹⁾ Refer to reflow profile for soldering conditions for surface mounted devices.

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
INPUT						
LED forward current, switch turn-on	$I_L = 100\text{ mA}, t = 10\text{ ms}$	I_{Fon}		1.2	3	mA
LED forward current, switch turn-off	$V_L = \pm 300\text{ V}$	I_{Foff}	0.2			mA
LED forward voltage	$I_F = 10\text{ mA}$	V_F	1	1.22	1.5	V
OUTPUT						
On-resistance	$I_F = 5\text{ mA}, I_L = \pm 50\text{ mA}$	R_{ON}		20	25	Ω
Off-resistance	$I_F = 0\text{ mA}, V_L = \pm 100\text{ V}$	R_{OFF}		5000		$\text{G}\Omega$
Current limit	$I_F = 5\text{ mA}, t = 5\text{ ms}$	I_{Limit}	170	210	250	mA
Output off-state leakage current	$I_F = 0\text{ mA}, V_L = \pm 100\text{ V}$	I_O		0.6	200	nA
	$I_F = 0\text{ mA}, V_L = \pm 350\text{ V}$	I_O			1	μA
Output capacitance	$I_F = 0\text{ mA}, V_L = \pm 1\text{ V}$	C_O		55		pF
Pole-to-pole capacitance (S1 to S2)	$I_F = 5\text{ mA}$			0.5		pF
TRANSFER						
Switch offset	$I_F = 5\text{ mA}$	V_{OS}		0.15		μV

Note

- Minimum and maximum values are testing requirements. Typical values are characteristics of the device and are the result of engineering evaluations. Typical values are for information only and are not part of the testing requirements.

SWITCHING CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Turn-on time	$I_F = 5\text{ mA}, I_L = 50\text{ mA}$	t_{on}		1.1	2.5	ms
Turn-off time	$I_F = 5\text{ mA}, I_L = 50\text{ mA}$	t_{off}		0.06	2.5	ms

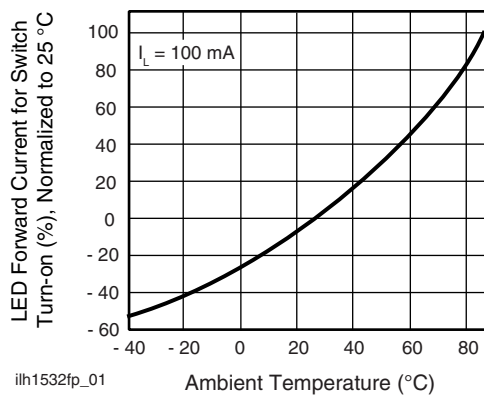
TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)


Fig. 1 - LED Current for Switch Turn-on vs. Temperature

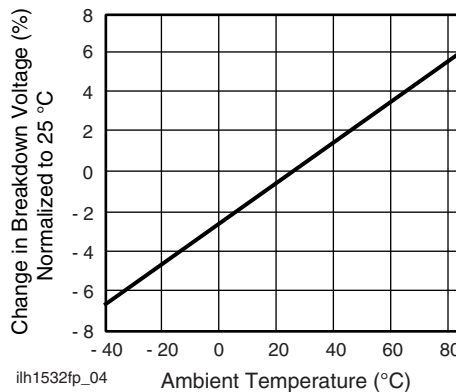


Fig. 4 - Switch Breakdown Voltage vs. Temperature

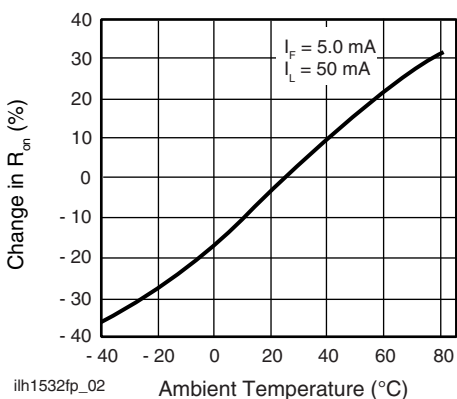


Fig. 2 - On-Resistance vs. Temperature

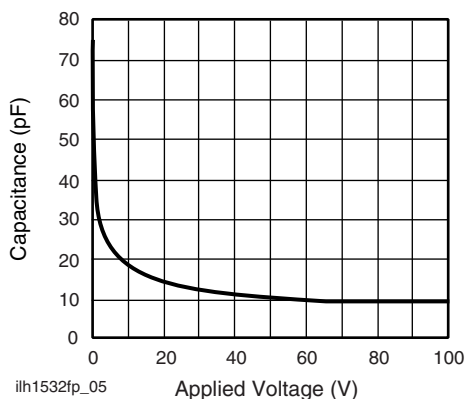


Fig. 5 - Switch Capacitance vs. Applied Voltage

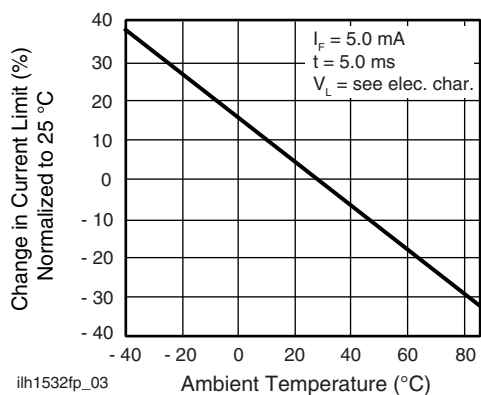


Fig. 3 - Current Limit vs. Temperature

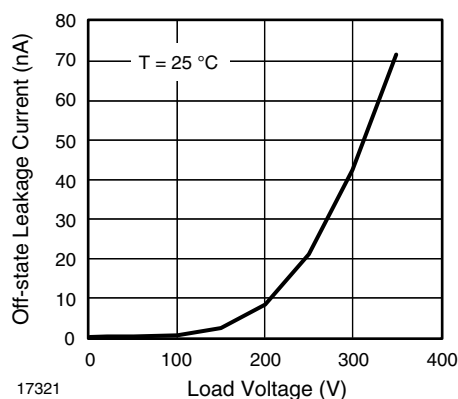


Fig. 6 - Leakage Current vs. Applied Voltage

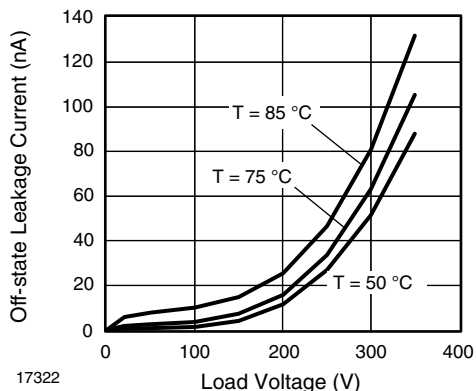


Fig. 7 - Leakage Current vs. Applied Voltage at Elevated Temperatures

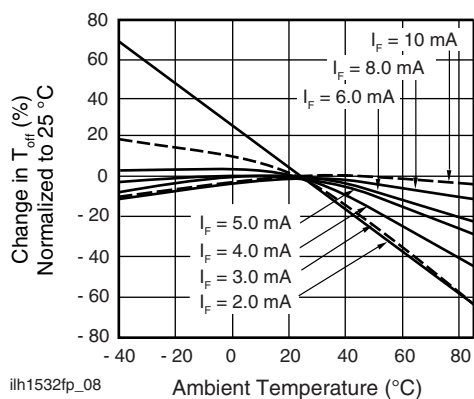


Fig. 8 - Turn-off Time vs. Temperature

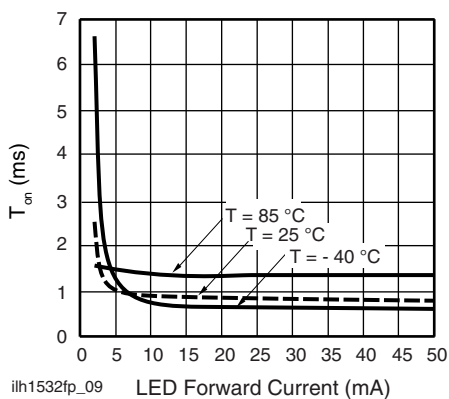
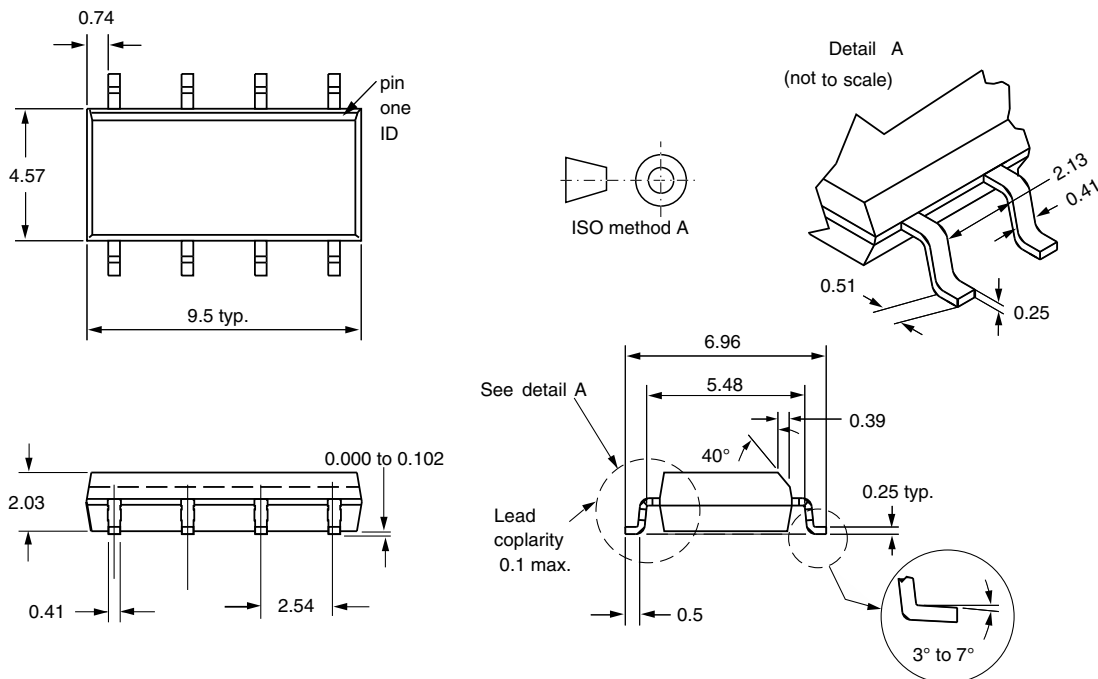


Fig. 9 - Turn-on Time vs. LED Current

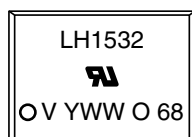


PACKAGE DIMENSIONS in millimeters



i178024

PACKAGE MARKING (example)



Note

- Tape and reel suffix (TR) is not part of the package marking.



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