



<b>ELECTRICAL CHARACTERISTICS</b> ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
<b>INPUT</b>							
Forward voltage	$I_F = \pm 10\text{ mA}$		$V_F$	-	1.25	1.5	V
<b>OUTPUT</b>							
Collector emitter breakdown voltage	$I_C = 10\text{ mA}$ , $I_F = 0\text{ A}$		$BV_{CEO}$	60	-	-	V
Collector emitter leakage current	$V_{CE} = 10\text{ V}$ , $I_F = 0\text{ A}$		$I_{CEO}$	-	1.0	100	nA
<b>COUPLER</b>							
Collector emitter, saturation voltage	$I_C = \pm 10\text{ mA}$ , $I_F = \pm 10\text{ mA}$		$V_{CEsat}$	-	-	1.0	V

**Note**

- Minimum and maximum values were tested 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

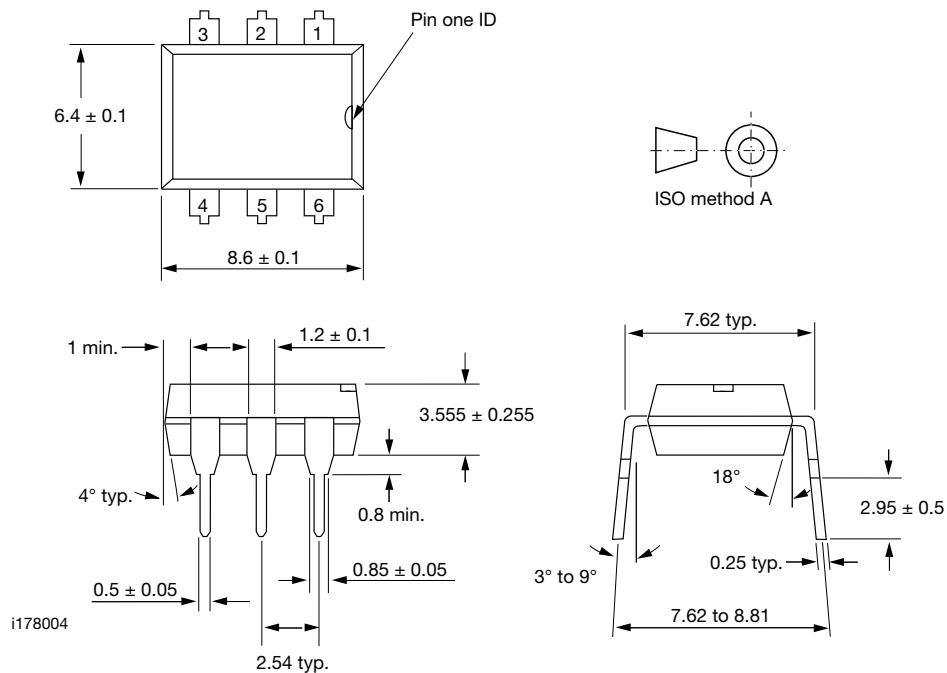
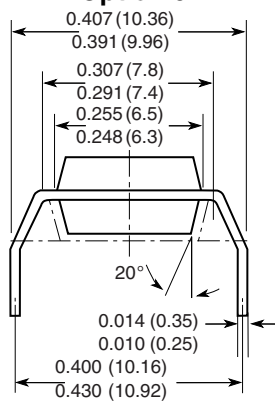
<b>CURRENT TRANSFER RATIO</b>							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Saturation voltage, collector emitter	$I_F = \pm 1.0\text{ mA}$ , $V_{CE} = 5.0\text{ V}$	IL766B-1	CTR	400	-	-	%
	$I_F = \pm 0.5\text{ mA}$ , $V_{CE} = 5.0\text{ V}$	IL766B-2	CTR	900	-	-	%

SWITCHING CHARACTERISTICS						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Turn-off time	V <sub>CC</sub> = 5.0 V, I <sub>F</sub> = ± 2.0 mA, R <sub>L</sub> = 100 Ω	t <sub>off</sub>	-	200	-	μs

<b>SAFETY AND INSULATION RATINGS</b>				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Climatic classification	According to IEC 68 part 1		55 / 100 / 21	
Comparative tracking index		CTI	175	
Maximum rated withstanding isolation voltage	$t = 1\text{ min}$	$V_{ISO}$	4420	$V_{RMS}$
Maximum transient isolation voltage		$V_{IOTM}$	10 000	$V_{peak}$
Maximum repetitive peak isolation voltage		$V_{IORM}$	890	$V_{peak}$
Isolation resistance	$V_{IO} = 500\text{ V}$ , $T_{amb} = 25\text{ }^{\circ}\text{C}$	$R_{IO}$	$\geq 10^{12}$	$\Omega$
	$V_{IO} = 500\text{ V}$ , $T_{amb} = 100\text{ }^{\circ}\text{C}$	$R_{IO}$	$\geq 10^{11}$	$\Omega$
Output safety power		$P_{SO}$	400	mW
Input safety current		$I_{SI}$	275	mA
Safety temperature		$T_S$	175	$^{\circ}\text{C}$
Creepage distance			$\geq 7$	mm
Clearance distance			$\geq 7$	mm
Insulation thickness		DTI	$\geq 0.4$	mm

**Note**

- As per IEC 60747-5-5, § 7.4.3.8.2, this optocoupler is suitable for "safe electrical insulation" only within the safety ratings. Compliance with the safety ratings shall be ensured by means of protective circuits

**PACKAGE DIMENSIONS** in inches (millimeters)**Option 6**

18446



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