SAFETY AND INSULATION RATINGS

As per DIN EN/IEC 60747–5–5, this optocoupler is suitable for "safe electrical insulation" only within the safety limit data. Compliance with the safety ratings shall be ensured by means of protective circuits.

Parameter

Characteristics

Installation Classifications per DIN VDE

ELECTRICAL CHARACTERISTICS

(T_A = 25 °C unless otherwise noted)

INDIVIDUAL COMPONENT CHARACTERISTICS

Symbol	Parameter	Test Condition	Min	Тур	Max	Unit		
INPUT								
V _F	Forward Voltage	I _F = 10 mA	-	1.2	1.4	V		
I _R	Reverse Current	V _R = 4 V	-	-	10	μΑ		
Ct	Terminal Capacitance	V = 0, f = 1 kHz	-	30	250	pF		
OUTPUT								
I _{CEO}	Collector Dark Current	$V_{CE} = 200, I_F = 0$	-	_	200	nA		
BV _{CEO}	Collector-Emitter Breakdown Voltage	$I_{\rm C} = 0.1 \text{ mA}, I_{\rm F} = 0$	300	-	-	V		
BV _{ECO}	Emitter-Collector Breakdown Voltage	$I_{E} = 10 \ \mu A, \ I_{F} = 0$	0.1	_	-	V		

TRANSFER CHARACTERISTICS

Symbol	DC Characteristics	Test Condition	Min	Тур	Max	Unit
Ι _C	Collector Current	$I_{F} = 1 \text{ mA}, V_{CE} = 2 \text{ V}$	10	40	150	mA
CTR	Current Transfer Ratio (Note 2)		1,000	4,000	15,000	%
V _{CE(SAT)}	Collector-Emitter Saturation Voltage	$I_F = 20 \text{ mA}, I_C = 100 \text{ mA}$	-	-	1.2	V
f _C	Cut-Off Frequency	V_{CE} = 2 V, I_{C} = 20 mA, R_{L} = 100 $\Omega,$ –3 dB	1	7	-	kHz
t _R	Response Time (Rise)	V_{CE} = 2 V, I_{C} = 20 mA, R_{L} = 100 Ω	-	100	300	μs
t _F	Response Time (Fall)					

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES (T_A = 25 $^{\circ}$ C unless otherwise noted)





TEST CIRCUITS



Figure 13. Test Circuit for Response Time

Figure 14. Test Circuit for Frequency Response

REFLOW PROFILE



Figure 15. Reflow Profile

ORDERING INFORMATION

Part Number	Package Type	Shipping [†]		
FOD852	DIP 4-Pin (Case 646CD)	2000 / Unit Box		
FOD852S	SMT 4-Pin (Lead Bend) (Case 709AH)	2000 / Unit Box		
FOD852SD	SMT 4-Pin (Lead Bend) (Case 709AH)	1000 / Tape & Reel		
FOD852300	DIP 4-Pin, DIN EN/IEC60747-5-5 option (Case 646CD)	2000 / Unit Box		
FOD8523S	SMT 4–Pin (Lead Bend), DIN EN/IEC60747–			

PDIP4 4.6x6.5, 2.54P CASE 646CA ISSUE O

DATE 31 JUL 2016





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PDIP4 4.6x6.5, 2.54P CASE 646CD ISSUE O

DATE 31 JUL 2016

NOTES:



PDIP4 4.60x6.50x3.85, 2.54P CASE 709AH ISSUE B

DATE 06 JUL 2023



NDTES:

- 1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
- 2. CONTROLLING DIMENSION: MILLIMETERS.
- 3. DIMENSIONS ARE EXCLUSIVE OF BURRS,



END VIEW



TOP VIEW







LAND PATTERN RECOMMENDATION

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