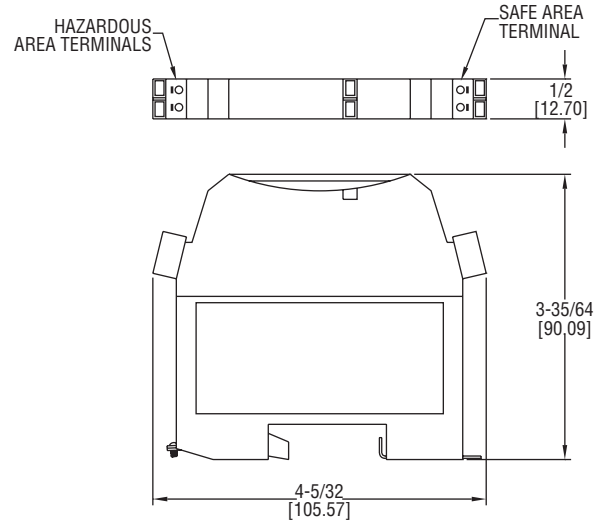


# ZENER BARRIER

## Intrinsically Safe Barriers for Hazardous Locations



**MTL7787**



The **SERIES MTL7706/7787** Zener Barrier is an intrinsically safe shunt-diode barrier that can be used to communicate with and provide isolations for certain Dwyer® transmitters approved for use in hazardous areas. These barriers limit the amount of energy allowed to pass into the hazardous area, which inhibit ignition in flammable atmospheres.

**FEATURES/BENEFITS**

- Approved for use in hazardous areas

**APPLICATIONS**

- Electrically isolates pressure and level transmitters from unregulated circuits for intrinsically safe applications

COMPATIBLE MODELS: 637, 608, SBLTX, PBLTX, IS626		
Model	Approval	Dwyer Series
<b>MTL7706</b>	UL for class I; div. 1 groups A, B, C, D CL II; div. 1 groups E, F, G; CL III div. 1	IS626, SBLTX, PBLTX
<b>MTL7706</b>	FM for class I, II, III; div. 1 groups B, C, D, E, F, G	637
<b>MTL7706</b>	FM for class I, II, III; div. 1 groups A, B, C, D, E, F, G	608

**Note:** Compatible models: 637, 608, SBLTX, PBLTX, IS626

MODEL CHART						
Model	FM			BASEEFA (ATEX)		
	Group	µF	mH	Group	µF	mH
<b>MTL7706</b>	A & B	0.083	4.2	IIC	0.083	4.2
<b>MTL7787</b>	A & B	0.083	3.05	IIC	0.083	3.05

SPECIFICATIONS	
<b>Transmitter Voltage:</b>	16.2 V at 20 mA with 250 Ω load (negative w.r.t. earth); 11.0 V at 20 mA with 500 Ω load (negative w.r.t. earth).
<b>Safe Area Output:</b>	4 to 20 mA.
<b>Load Resistance:</b>	0 to 500 Ω.
<b>Power Requirement:</b>	20 to 35 VDC w.r.t. earth.
<b>Accuracy:</b>	±2 µA under all conditions.
<b>LED Indicator:</b>	Green: Power indication.
<b>Temperature Limits:</b>	Operating: -4 to 140°F (-20 to 60°C); Storage: -40 to 176°F (-40 to 80°C).
<b>Humidity:</b>	5 to 95% RH.
<b>Terminals:</b>	Accommodate up to 2.5 mm2 stranded or single-core.
<b>Safety Description:</b>	28 µV, 300 Ω, 93 mA.
<b>Weight:</b>	4.9 oz (140 g).
<b>Agency Approvals:</b>	See table.

MODEL CHART	
Model	Description
<b>MTL7706</b>	Zener barrier
<b>MTL7787</b>	Zener barrier

ACCESSORY	
Model	Description
<b>A-360</b>	Aluminum DIN rail 1 m

Region (Authority)	Standard	Approved For	Certificate/ File no.
USA (FM) (UL)	3600, 3610 entity 3611, 3810 UL698, UL913 UL1604	AIS/I,II,III/1/Entity ABCDEFG-SCI-942; NI/II/@/ABCD/T4 [I/O] AEx[ia]IIC-SCI-942 Entity; NI/1/2/IIC/T4; Ta=140°F (60°C)	3010737
Canada (CSA)	CAN/CSA E60070, IEC60079, C22.2	Class I, Div.2, Gps A, B, C, D; Ex nA [iA] IIC T4 Class I, Xone 2, Aex nA IIC T4	1345550
UK (BASEEFA)	EN 50014, EN 50020	EEx ia IIC	BAS01ATEX7217
UK (BASEEFA) Systems	EN 50039	EEx ia IIC	Ex01E2219

Intrinsically Safe Barriers