

## CMZ12 Series (SMD)

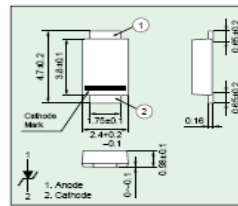
### Maximum Ratings

Characteristic	Symbol	Rating	Unit
Power Dissipation	P	2	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-40 to 150	°C

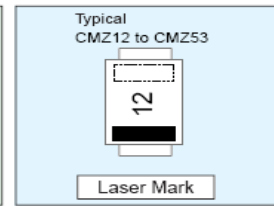
### Package Appearance



### Package Dimensions (mm)



### Marking



### Electrical Characteristics (Ta = 25°C)

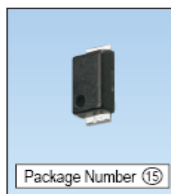
Part Number	Zener Characteristics					Temperature Coefficient of Zener Voltage αT (mV/°C)		Forward Voltage V <sub>F</sub> (V)	Measurement Current I <sub>F</sub> (A)	Reverse Current I <sub>R</sub> (μA)	Measurement voltage V <sub>R</sub> (V)
	Zener voltage V <sub>Z</sub> (V)			Zener impedance r <sub>d</sub> (Ω)	Measurement current I <sub>Z</sub> (mA)	Typ.	Max				
	Min	Typ.	Max	Max							
CMZ12	10.8	12	13.2	30	10	-	13	1.2	0.2	10	8
CMZ13	11.7	13	14.3	30	10	-	14	1.2	0.2	10	9
CMZ15	13.5	15	16.5	30	10	-	17	1.2	0.2	10	10
CMZ16	14.4	16	17.6	30	10	-	19	1.2	0.2	10	11
CMZ18	16.2	18	19.8	30	10	-	23	1.2	0.2	10	13
CMZ20	18.0	20	22.0	30	10	-	26	1.2	0.2	10	14
CMZ22	19.8	22	24.2	30	10	-	28	1.2	0.2	10	16
CMZ24	21.6	24	26.4	30	10	-	32	1.2	0.2	10	17
CMZ27	24.3	27	29.7	30	10	-	36	1.2	0.2	10	19
CMZ30	27.0	30	33.0	30	10	-	40	1.2	0.2	10	21
CMZ33	29.7	33	36.3	30	10	-	41	1.2	0.2	10	26.4
CMZ36	32.4	36	39.6	30	9	-	45	1.2	0.2	10	28.8
CMZ39	35.1	39	42.9	35	8	-	48	1.2	0.2	10	31.2
CMZ43	38.7	43	47.3	40	7	-	53	1.2	0.2	10	34.4
CMZ47	42.3	47	51.7	65	6	-	60	1.2	0.2	10	37.6
CMZ51	45.9	51	56.1	65	6	-	68	1.2	0.2	10	40.8
CMZ53	47.7	53	58.3	85	5	-	77	1.2	0.2	10	42.4

## CMZM16 Series (SMD) Bi-directional Zener Diodes

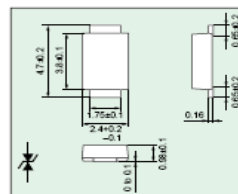
### Maximum Ratings

Characteristic	Symbol	Rating	Unit
Power Dissipation	P	1.0	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-40 to 150	°C

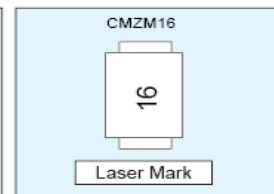
### Package Appearance



### Package Dimensions (mm)



### Marking



### Electrical Characteristics (Ta = 25°C)

Part Number	Zener Characteristics					Temperature Coefficient of Zener Voltage αT (mV/°C)		Reverse Current I <sub>R</sub> (μA)	Measurement voltage V <sub>R</sub> (V)
	Zener voltage V <sub>Z</sub> (V)			Zener impedance r <sub>d</sub> (Ω)	Measurement current I <sub>Z</sub> (mA)	Typ.	Max		
	Min	Typ.	Max	Max					
CMZM16	14.4	16	17.6	30	10	-	19	10	11