

Conductivity and Resistivity Values for Titanium & Alloys

Material	Conductivity		Resistivity	Reference	Notes
	(% IACS)	(Siemens/m)	(Ohm-m)	(See Endnotes)	
Titanium					
Titanium	3.10	1.798E+06	5.562E-07	ECTM	
Titanium	2.20	1.276E+06	7.837E-07	CSNDT	
ASTM grades 1, 2, 3, 4, 7, and 11	3.3-4.1		4.2E-7--5.2E-7	MHASM2	conductivity converted from resistivity
Ti-5Al-2.5Sn	1.10		1.570E-06	MHASM2	conductivity converted from resistivity
Ti-5Al-2.5Sn (low O ₂)	0.96		1.800E-06	MHASM2	conductivity converted from resistivity
Ti-8Al-1Mo-1V	0.87		1.990E-06	MHASM2	conductivity converted from resistivity
Ti-11Sn-1Mo2.25Al-5.0Zr-1Mo-0.2Si	1.06		1.620E-06	MHASM2	conductivity converted from resistivity
Ti-6Al-2Sn-4Zr-2Mo	0.91		1.900E-06	MHASM2	conductivity converted from resistivity
IMI 685	1.03		1.680E-06	MHASM2	conductivity converted from resistivity
Ti-8Mn	1.87		9.200E-07	MHASM2	conductivity converted from resistivity
Ti-6Al-4V	1.01		1.710E-06	MHASM2	conductivity converted from resistivity
Ti-6AL-4V	1.00	5.800E+05	1.724E-06	ECTM	
Ti-6Al-6V-2Sn	1.10		1.570E-06	MHASM2	conductivity converted from resistivity
Ti-7Al-4Mo	1.01		1.700E-06	MHASM2	conductivity converted from resistivity
IMI 550	1.09		1.580E-06	MHASM2	conductivity converted from resistivity
Ti-11.5Mo-Zr-4.5Sn	1.11		1.560E-06	MHASM2	conductivity converted from resistivity
Ti-15V-3Cr-3Al-3Sn	1.17		1.470E-06	MHASM2	conductivity converted from resistivity

CSNDT=CSNDT compiled by Eddy Current Technology Incorporated

ECTM=Eddy Current Testing Manual on Eddy Current Mehtod compiled by Eddy Current Technology Inc.

MHASM2=ASM Metals Handbook--Volume 2, Tenth Edition