



## NO27

### TYPICAL VALUES

POLARISATION $J_{peak}$ T	SPECIFIC TOTAL LOSS				
	at 50 Hz W/kg	at 400 Hz W/kg	at 2500 Hz W/kg	at 5000 Hz W/kg	at 10000 Hz W/kg
0.1	0.01	0.22	3.17	9.78	26.2
0.2	0.05	0.84	11.9	34.4	96.6
0.3	0.11	1.75	25.2	70.4	209
0.4	0.19	2.87	42.6	119	
0.5	0.26	4.15	64.0	176	
0.6	0.35	5.66	89.8	254	
0.7	0.45	7.35	121	350	
0.8	0.57	9.25	157	435	
0.9	0.71	11.4	200		
1.0	0.85	13.7	255		
1.1	1.02	16.2	309		
1.2	1.21	19.2			
1.3	1.46	22.9			
1.4	1.78	27.5			
1.5	2.10	32.6			
1.6	2.40				
1.7	2.63				
1.8	2.87				

	GUARANTEED VALUES	TYPICAL VALUES
Loss at 1.0 T and 50 Hz, W/kg	-	0.85
Loss at 1.0 T and 400 Hz, W/kg	15.0	13.7
Loss at 1.0 T and 2500 Hz, W/kg	300	255
Nominal thickness, mm		0.27
Resistivity, $\mu\Omega\text{cm}$		59
Density, $\text{g/cm}^3$		7.60
Yield strength, $\text{N/mm}^2$		440
Tensile strength, $\text{N/mm}^2$		530
Young's modulus, RD, $\text{N/mm}^2$		175 000
Young's modulus, TD, $\text{N/mm}^2$		190 000
Hardness HV5		210

RD represents the rolling direction

TD represents the transverse direction

Values for yield strength (0.2 % proof strength)

and tensile strength are given for the rolling direction

Values for the transverse direction are approximately 5% higher



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### TYPICAL VALUES

POLARISATION $J_{peak}$ T	MAGNETIC FIELD STRENGTH $H_{peak}$				
	at 50 Hz A/m	at 400 Hz A/m	at 2500 Hz A/m	at 5000 Hz A/m	at 10000 Hz A/m
0.1	25	32	41	55	82
0.2	33	41	68	93	137
0.3	38	51	88	125	182
0.4	43	57	109	156	
0.5	48	64	129	191	
0.6	55	70	151	233	
0.7	62	77	176	270	
0.8	71	83	204		
0.9	83	93	236		
1.0	99	107	280		
1.1	124	128	325		
1.2	171	175			
1.3	283	294			
1.4	688	715			
1.5	1990	1930			
1.6	4290				
1.7	7650				
1.8	12300				

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