





# MG35P12P3

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Gate-Emitter Threshold Voltage      V



				!
Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_{vj}=25$	1200	V
Continuous DC Forward Current	$I_F$		35	A
Repetitive Peak Forward Current	$I_{FRM}$	$t_p=1ms$	70	A
$I^2t$ -value	$I^2t$	$V_R=0V, t_p=10ms, T_{vj}=125$	240	A <sup>2</sup> s
		$V_R=0V, t_p=10ms, T_{vj}=150$	220	

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Forward Voltage	$V_F$	$I_F=35A, T_{vj}=25$		2.1	2.50	V
		$I_F=35A, T_{vj}=125$		2.2		
		$I_F=35A, T_{vj}=150$		2.2		
Recovered Charge Peak R	$Q_{rr}$	$I_F = 35 A$ $V_R=600V$ $-di_F/dt = 900A/us$ $T_{vj}=25$		3.95		$\mu C$



**MG35**



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Turn-on Delay Time	$t_{d(on)}$	$I_C=35\text{ A}$ $V_{CE}=600\text{ V}$ $V_{GE}=\pm 15\text{ V}$ $R_G=12\Omega$ $T_{vj}=125$	25		ns
Rise Time	$t_r$		16		ns
Turn-off Delay Time	$t_{d(off)}$		295		ns
Fall Time	$t_f$		170		ns
Energy Dissipation During Turn-on Time	$E_{on}$		2.90		mJ
Energy Dissipation During Turn-off Time	$E_{off}$		2.90		mJ
SC Data	$I_{SC}$		$t_p \leq 10\mu\text{s}, V_{GE}=15\text{ V}, T_{vj}=150$ , $V_{CC}=900\text{ V}, V_{CEM} \leq 1200\text{ V}$	150	

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Repetitive Peak Reverse Voltage	$V_{RRM}$	$T_{vj}=25$	1200		V
Continuous DC Forward Current	$I_F$		15		A
Repetitive Peak Forward Current	$I_{FRM}$	$t_p=1\text{ ms}$	30		A
Rt-value	$I^2t$	$V_R=0\text{ V}, t_p=10\text{ ms}, T_{vj}=125$	16.0		A <sup>2</sup> s
		$V_R=0\text{ V}, t_p=10\text{ ms}, T_{vj}=150$	14.0		

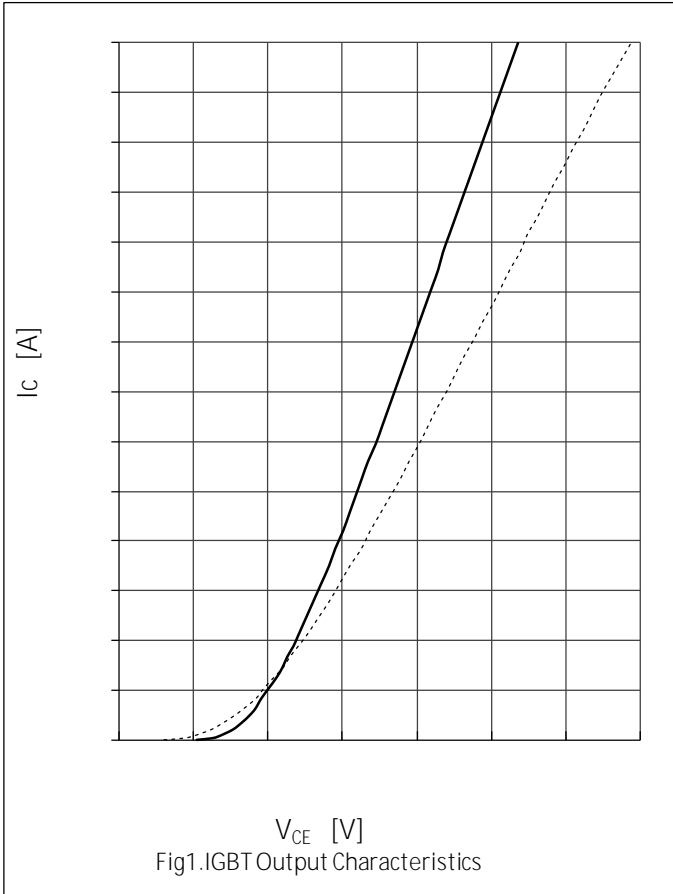
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Forward Voltage	$V_F$	$I_F=15\text{ A}, T_{vj}=25$	2.00	2.65	V	
		$I_F=15\text{ A}, T_{vj}=125$	2.10			
		$I_F=15\text{ A}, T_{vj}=150$	2.10			
Recovered Charge	$Q_{rr}$	$I_F=15\text{ A}$	1.20		uC	
Peak Reverse Recovery Current	$I_{rr}$	$V_R=600\text{ V}$ $-di_F/dt=600\text{ A}/\mu\text{s}$	13.0		A	
Reverse Recovery Energy	$E_{rec}$	$T_{vj}=25$	0.37		mJ	

Recovered Charge  $Q_{rr}$  EN61511 CID 386/Lang(en-US)BDI

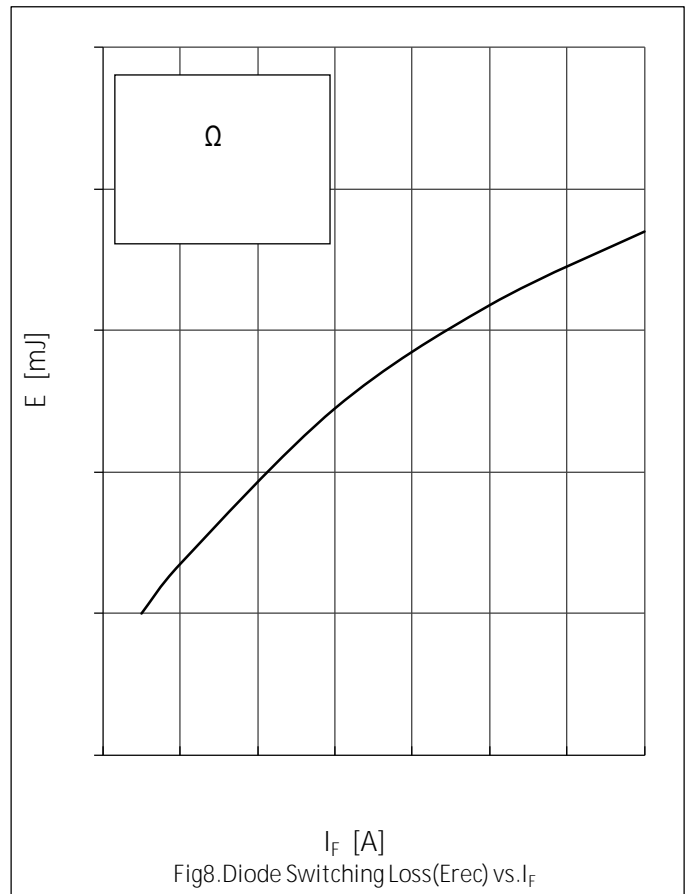
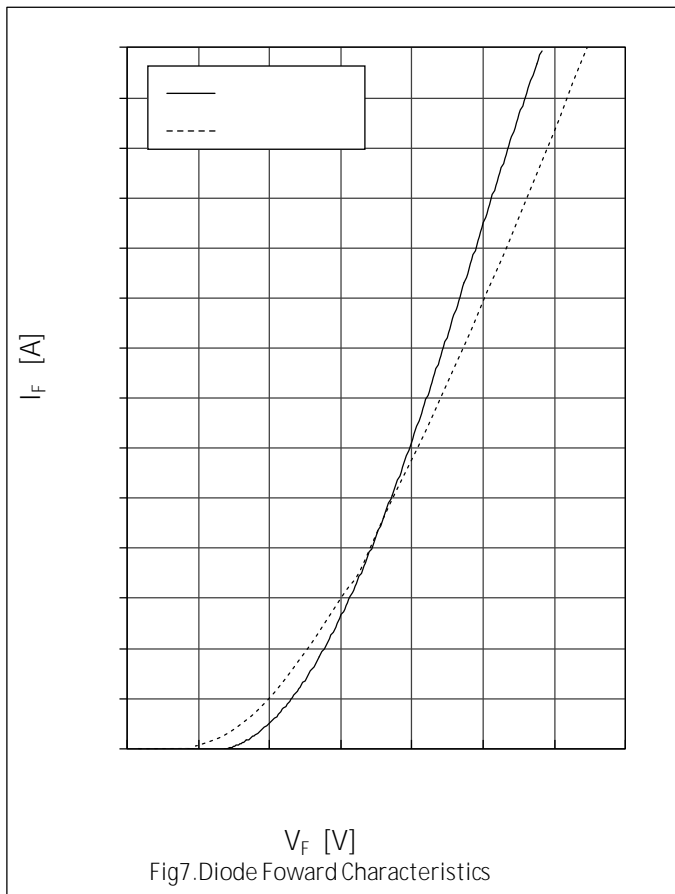
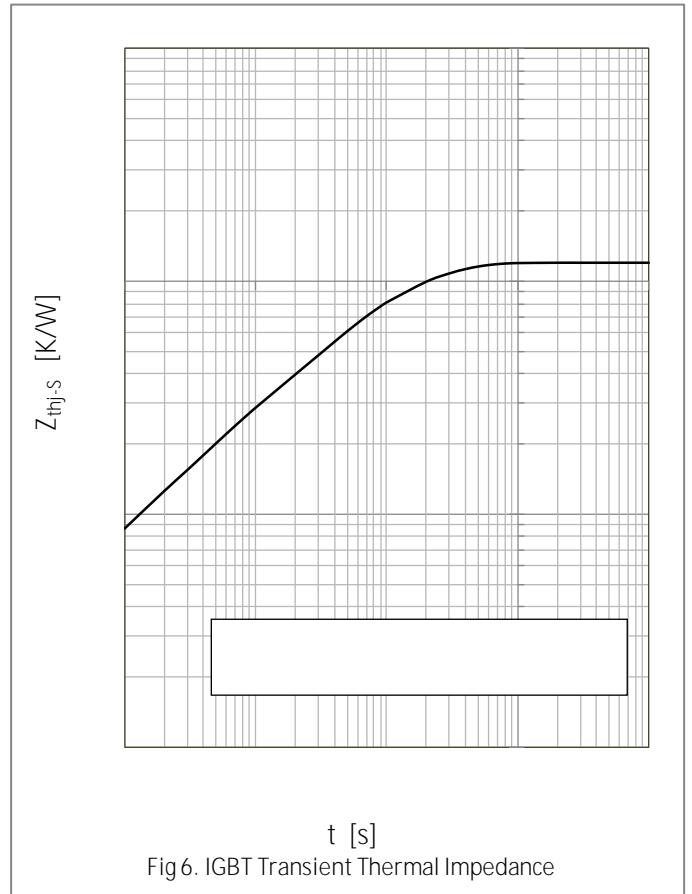
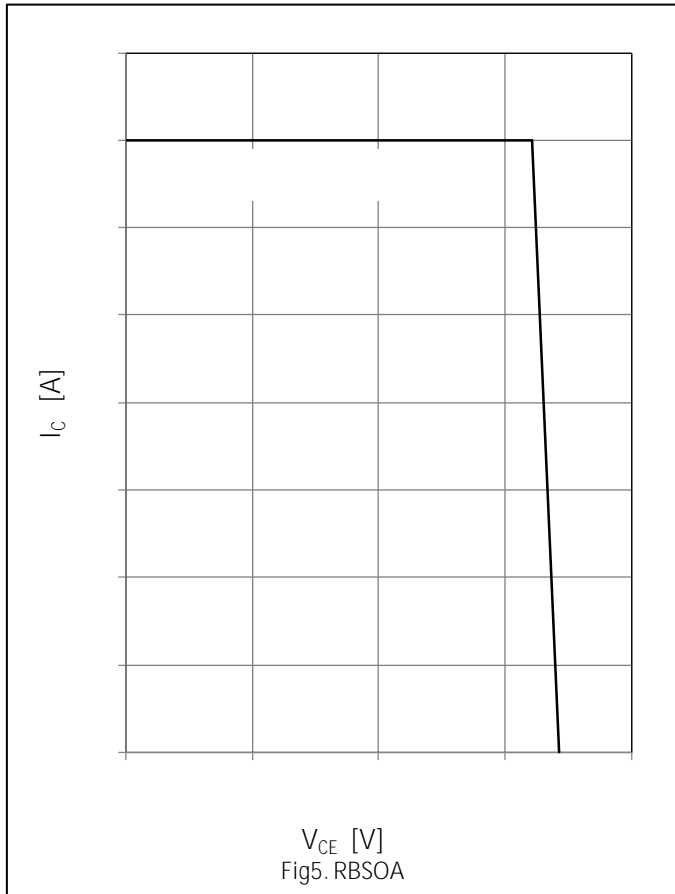


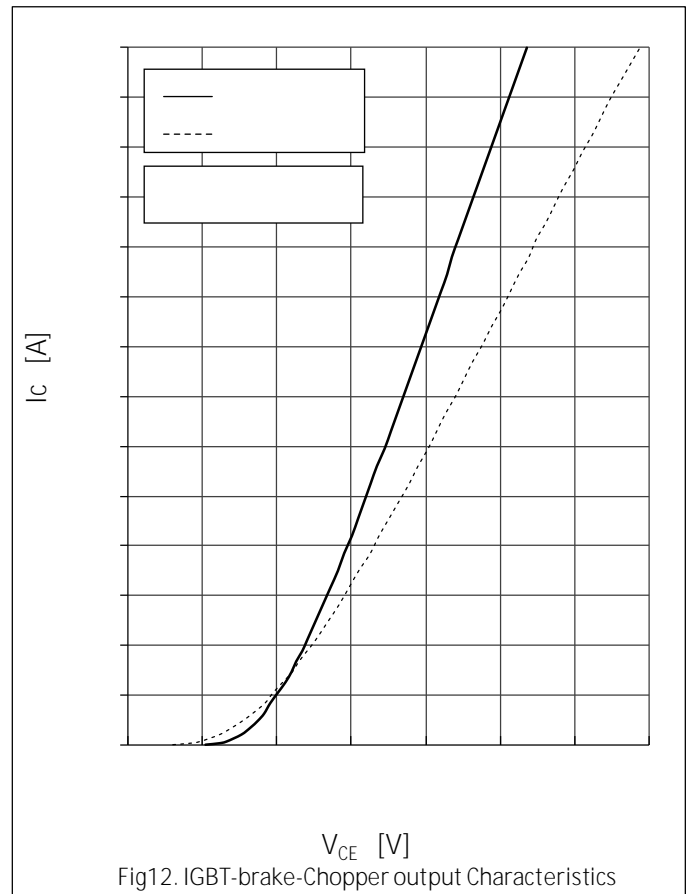
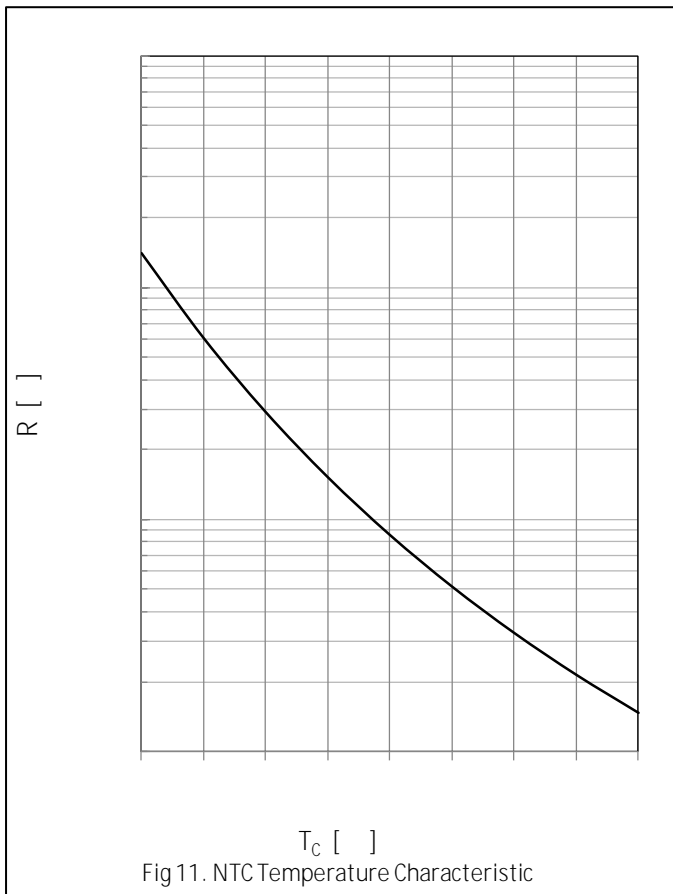
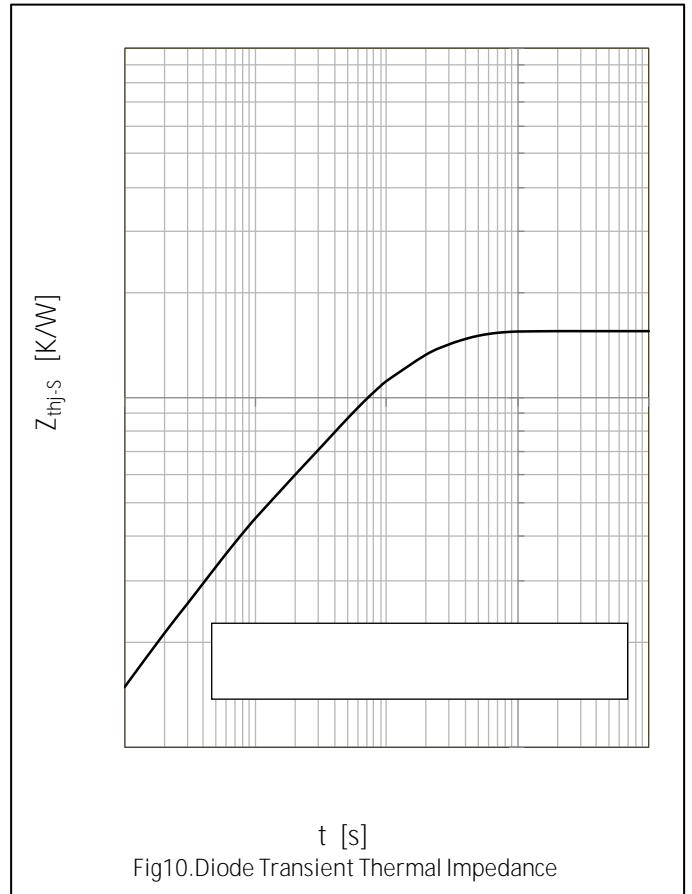
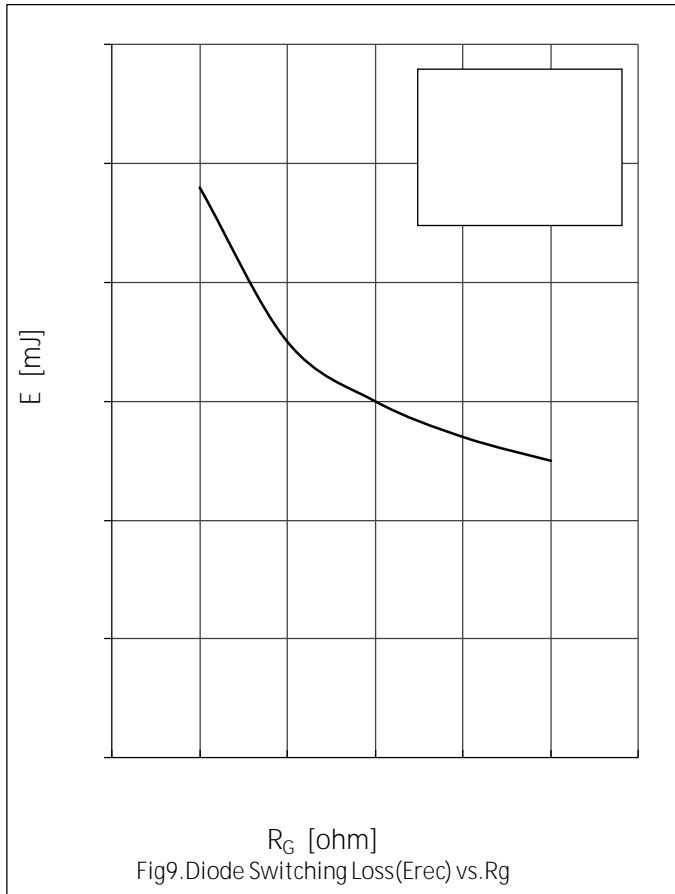


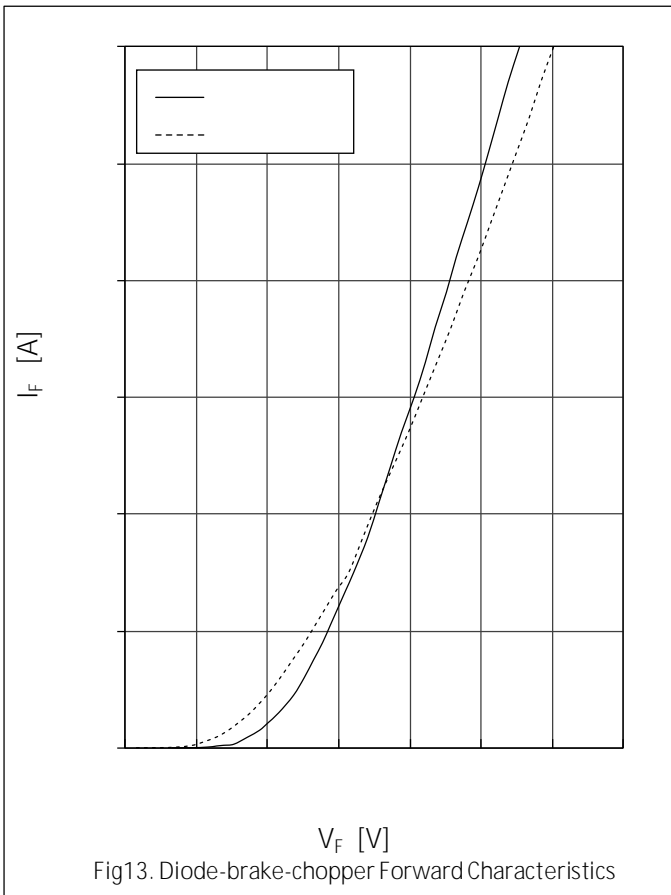
Isolation voltage	$V_{isol}$	$t=1min, f=50Hz$	2500		V!	
Maximum Junction Temperature	$T_{jmax}$			175	!	
Operating Junction Temperature	$T_{vj op}$		-40	150		
Storage Temperature	$T_{stg}$		-40	125		
Stray-inductance-module	$L_{SCE}$			30	!	
Module lead resistance, terminals-chip	$R_{CC'+EE}$	$T_C=25$ , per switch		5.00	$\Omega!$	
	$R_{AA'+CC'}$			6.00		
Thermal Resistance Junction-to Case	$R_{\theta JC}$	per IGBT-inverter		0.60	0.70	K/W
		per Diode-inverter		0.80	0.90	
		per IGBT-brake-chopper		0.60	0.70	
		per Diode-chopper		1.30	1.45	
		per Diode-rectifier		0.90	1.25	
Thermal Resistance Case-to Sink	$R_{\theta CS}$	per IGBT-inverter		0.60		K/W
		per Diode-inverter		0.75		
		per IGBT-brake-chopper		0.60		
		per Diode-chopper		1.05		
		per Diode-rectifier		0.95		
		per Module		0.037		
Mounting Force Per Clamp	F		30	80	N	
Weight of Module	G			45	g	











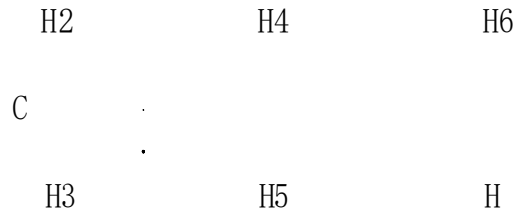
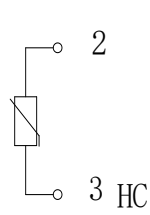


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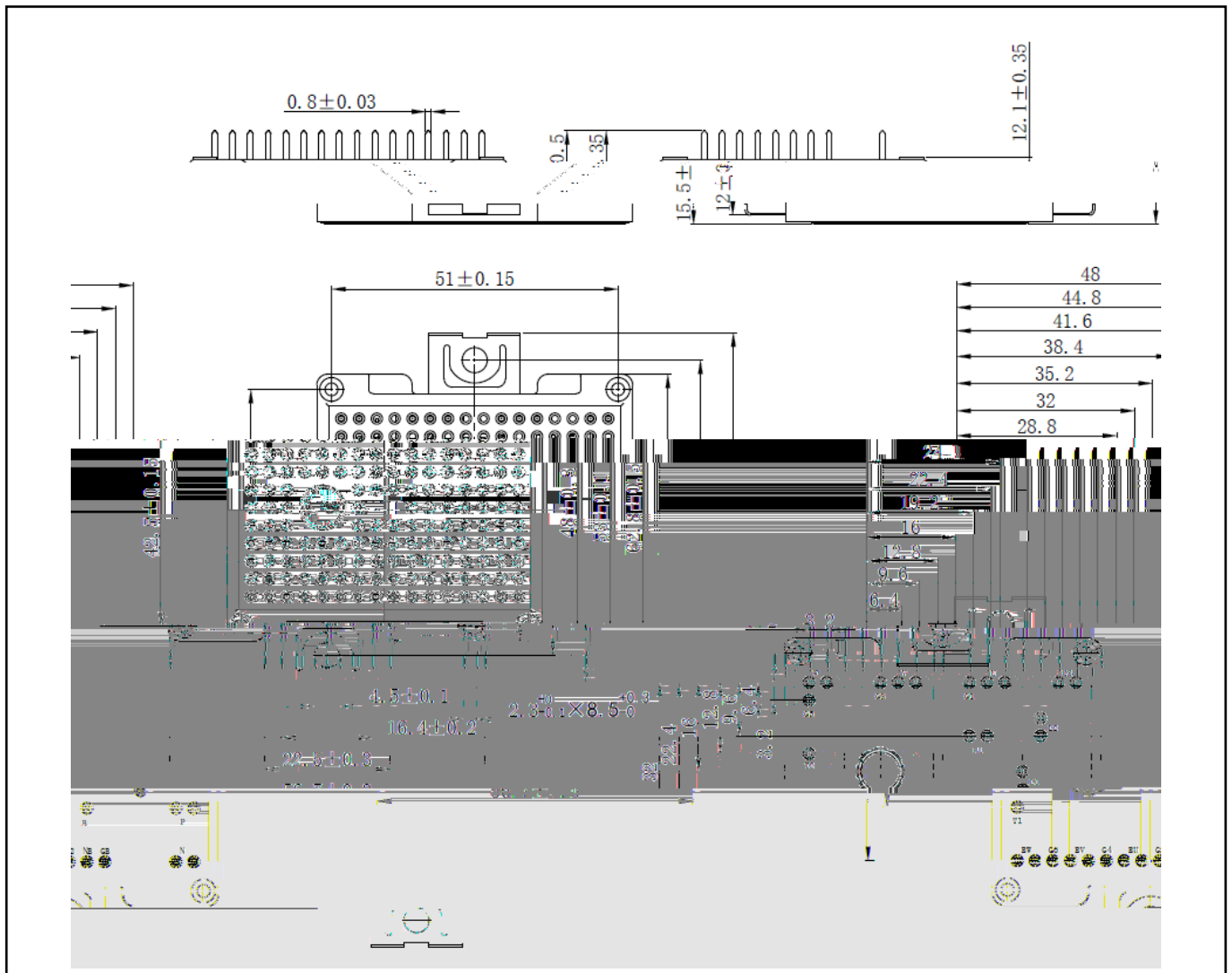
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M3  
M4



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