

MG 25P12



IGBT inverter

Characteristic values

Parameter	Symbol	Conditions	Value			Unit
			Min.	Typ.	Max.	
Gate-emitter threshold voltage	$V_{GE(th)}$	$V_{GE}=V_{CE}, I_C=1.2mA, T_V=25$	5.2	5.9	6.5	V



Diode inverter

Absolute Maximum Ratings

Parameter	Symbol	Conditions	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	$T_V=25$	1200	V
Continuous DC Forward Current	I_F		25	A
Repetitive Peak Forward Current	I_{FRM}	$t_p=1ms$	50	A
P _t -value	P_t	$V_R=0V, t_p=10ms, I_F=125$	900	A ² s
		$V_R=0V, t_p=10ms, I_F=150$	750	

Characteristic values

Parameter	Symbol	Conditions	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	V_F	$I_F=25A, T_V=25$		2.05	2.70	V
		$I_F=25A, T_V=125$		1.85		
		$I_F=25A, T_V=150$		1.80		
Recovered Charge	Q_r	$I_F=25A$		2.78		uC
Peak Reverse Recovery Current	I_{rr}	$V_R=600V$ $-di/dt=60A/\mu s$		18		A
Reverse Recovery Energy	E_{rec}	$T_V=25$		0.94		mJ
Recovered Charge	Q_r	$I_F=25A$ $V_R=600V$ $-di/dt=60A/\mu s$ $T_V=150$		3.79		uC



IGBT brake chopper

Absolute Maximum Ratings

Parameter	Symbol	Conditions	Value	Unit
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Collector-Emitter Voltage



TurnonDelayTime	$t_{d(on)}$	$I_C=15A$ $V_{CE}=600V$ $V_{GE}=\pm 1V$ $R_G=39$ $T_V=150$	15	ns
RiseTime	t_r		39	ns
TurnoffDelayTime	$t_{d(off)}$		99	ns
FallTime	t_f		426	ns
Energy Dissipation During TurnonTime	E_{on}		2.35	mJ
Energy Dissipation During TurnoffTime	E_{off}		1.29	mJ
SC Data	I_{sc}		$t_p 10\mu s, V_{CE}=15V, T_V=150$, $V_{CC}=900V, V_{EM} 1200V$	55



Diode Rectifier

Absolute Maximum Ratings

Parameter	Symbol	Conditions	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	$T_j=25$	1600	V
Average output Current 50/60Hz, sine wave	$I_{F(AV)}$	$T_C=100$	35	A
Maximum RMS Current Rectifier Output	I_{RMSM}	$T_C=100$	60	A
Surge Forward Current	I_{FSM}	$V_R=0, t_p=10ms, f=45$	320	A
I^2t -value	I^2t	$V_R=0, t_p=10ms, f=45$	510	A^2s

Characteristic values

Parameter	Symbol	Conditions	Value	Unit
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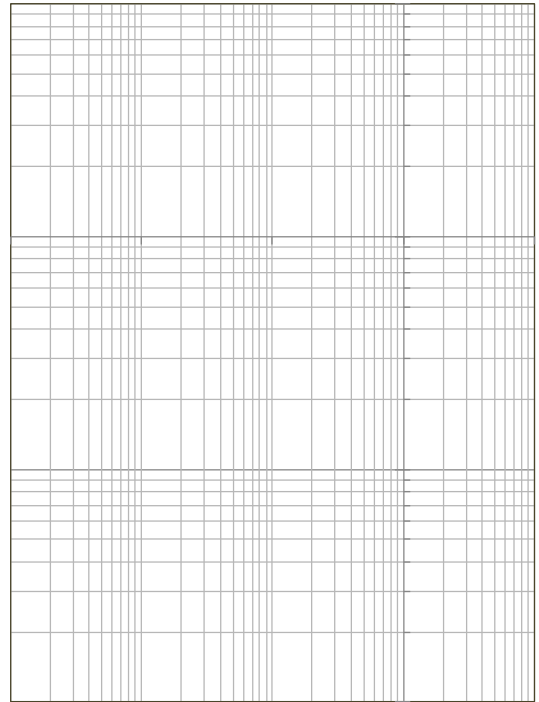
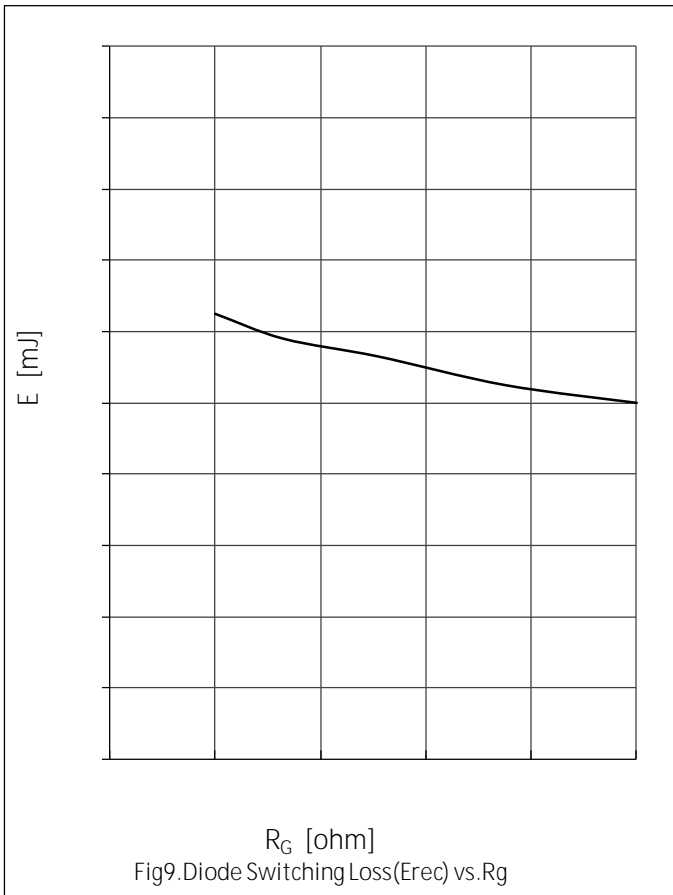
MG 25P12E1A COMPLIANT

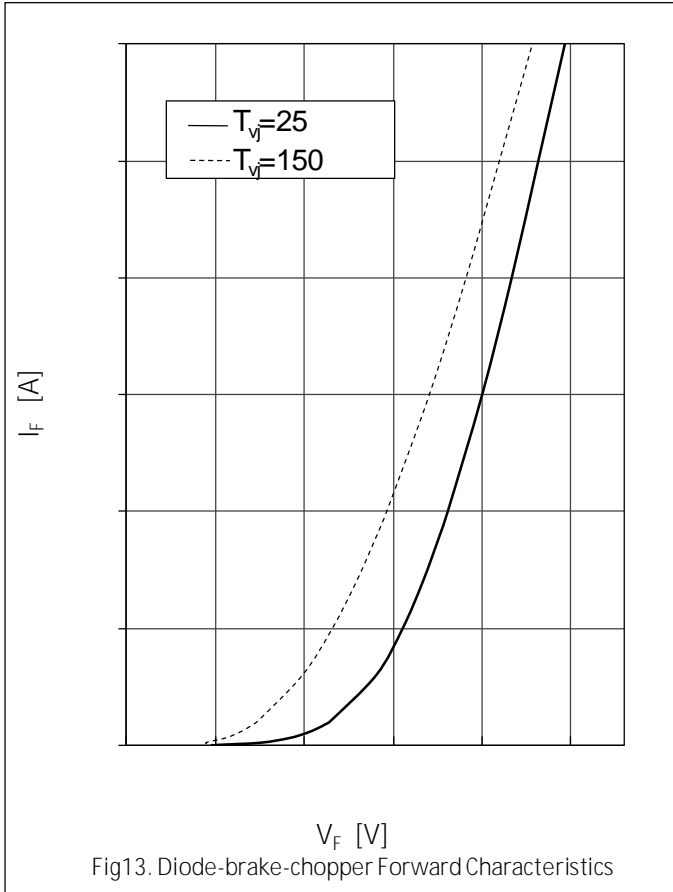


MG25P12E1A RoHS
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MG25P12E1A RoHS
COMPLIANT







CircuitDiagram

Package Outline Information





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