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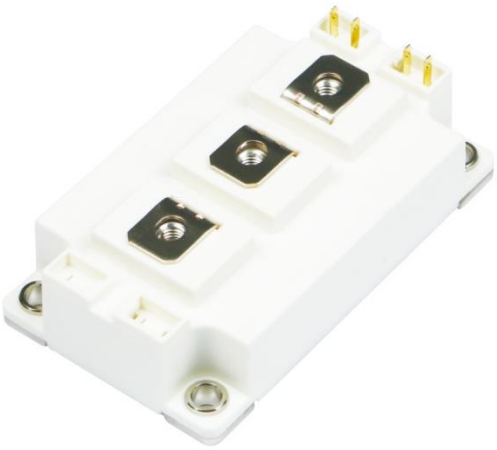
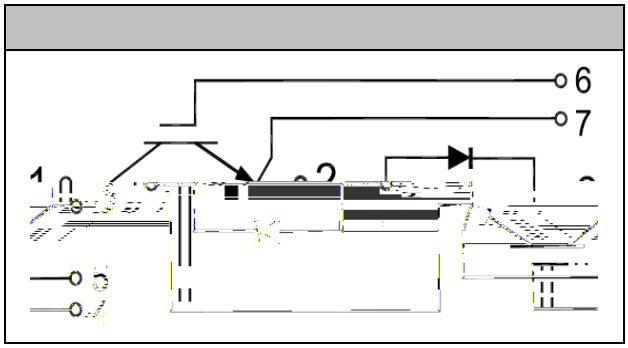


IGBT Modules

V_{CES}	1200V
I_C	150A

Applications

- High frequency drivers
- Solar inverters
- UPS (Uninterruptible Power Supplies)
- Electric welding machine



Features

- High speed IGBT in NPT technology
- Low switching losses
- High short circuit capability(10us)
- Including ultra fast & soft recovery anti-parallel FWD
- Low inductance
- Maximum junction temperature 150

IGBT

Absolute Maximum Ratings

Parameter	Symbol	Conditions	Value	Unit
Collector-Emitter Voltage	V_{CES}	V_{GE}=0V, I_C =1mA, T_{vj}=25	1200	V
Continuous Collector Current	I_C	T_c=80	150	A
Repetitive Peak Collector Current	I_{CRM}	tp=1ms	300	A
Gate-Emitter Voltage	V_{GES}	T_{vj}=25	20	V
Total Power Dissipation	P_{tot}	T_c=25 T_{vjmax}=150	1136	W

Characteristic values

Parameter	Symbol	Conditions	Value	Unit

Diode

Absolute Maximum Ratings

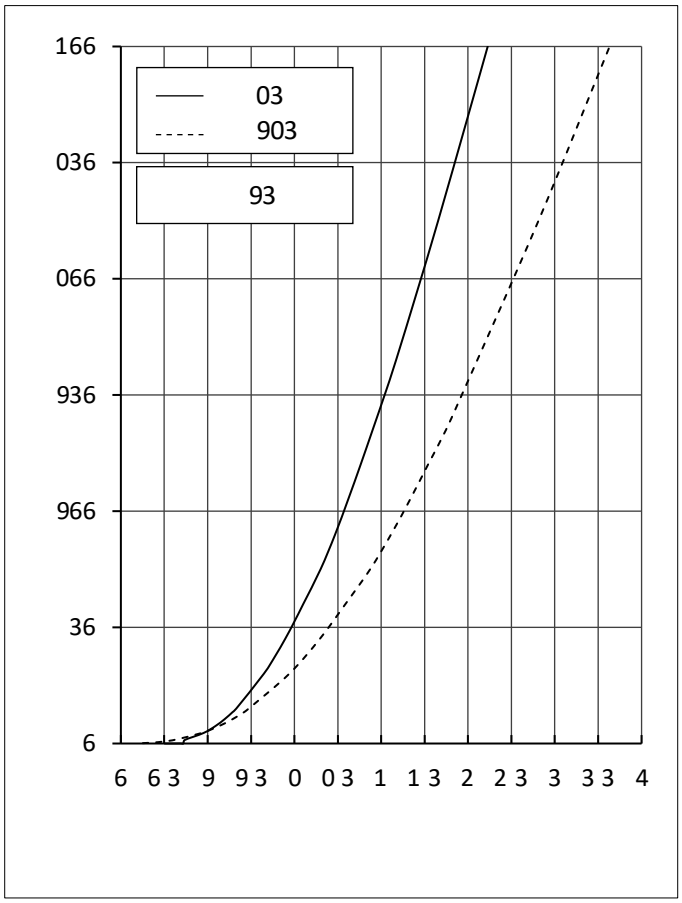
Parameter	Symbol	Conditions	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	T_{vj}=25	1200	V
Continuous DC Forward Current	I_F		150	A
Repetitive Peak Forward Current	I_{FRM}	t_p=1ms	300	A

Characteristic values

Parameter	Symbol	Conditions	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	V_F	I_F=150A,T_{vj}=25		1.90	2.40	V
		I_F=150A,T_{vj}=125		1.95		
Recovered Charge	Q_{rr}	I_F =150 A V_R=600V -di_F/dt =1400A/us T_{vj}=25		6.8		uC
Peak Reverse Recovery Current	I_{rr}			145		A
Reverse Recovery Energy	E_{rec}			4.1		mJ
Recovered Charge	Q_{rr}	I_F =150 A V_R=600V -di_F/dt =1400A/us T_{vj}=125		14.5		uC
Peak Reverse Recovery Current	I_{rr}			160		A
Reverse Recovery Energy	E_{rec}			8.4		mJ

Module Characteristics T_C=25°C unless otherwise specified

Parameter	Symbol	Conditions	Value			Unit
			Min.	Typ.	Max.	
Isolation voltage	V_{isol}	t=1min,f=50Hz	2500			V
Maximum Junction Temperature	T_{jmax}			150		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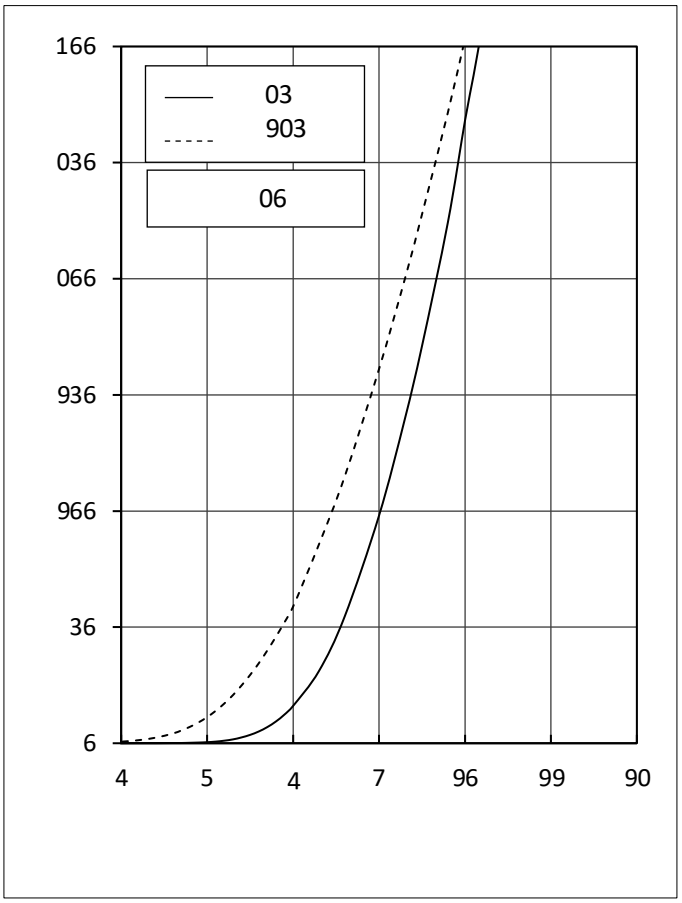
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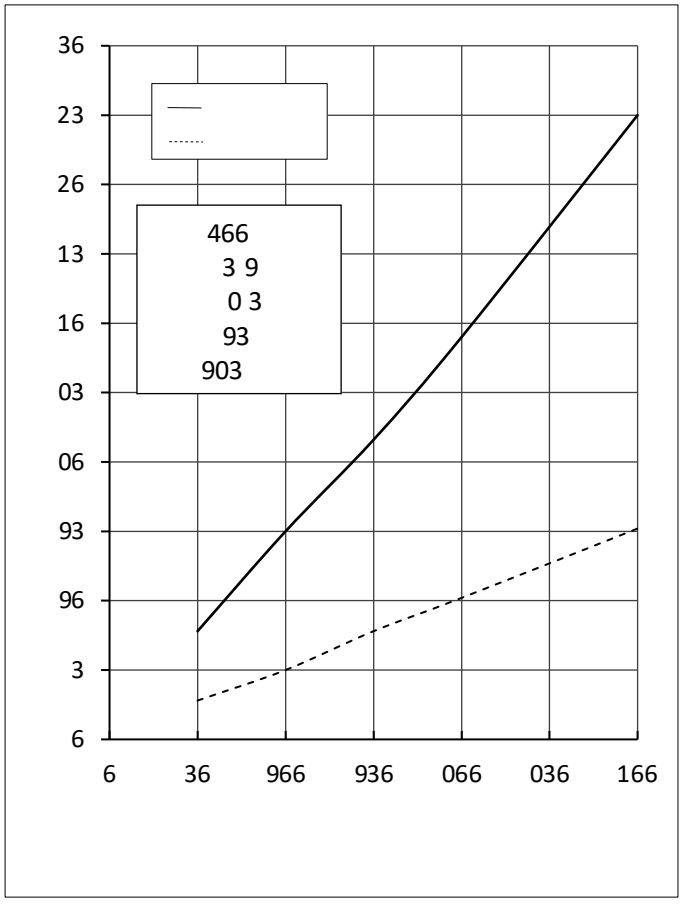
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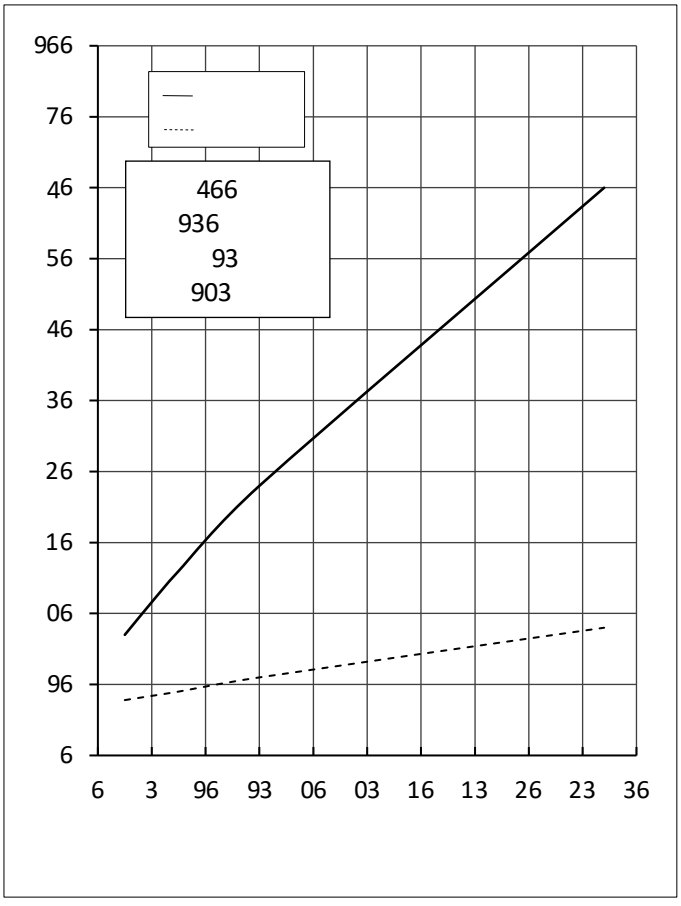
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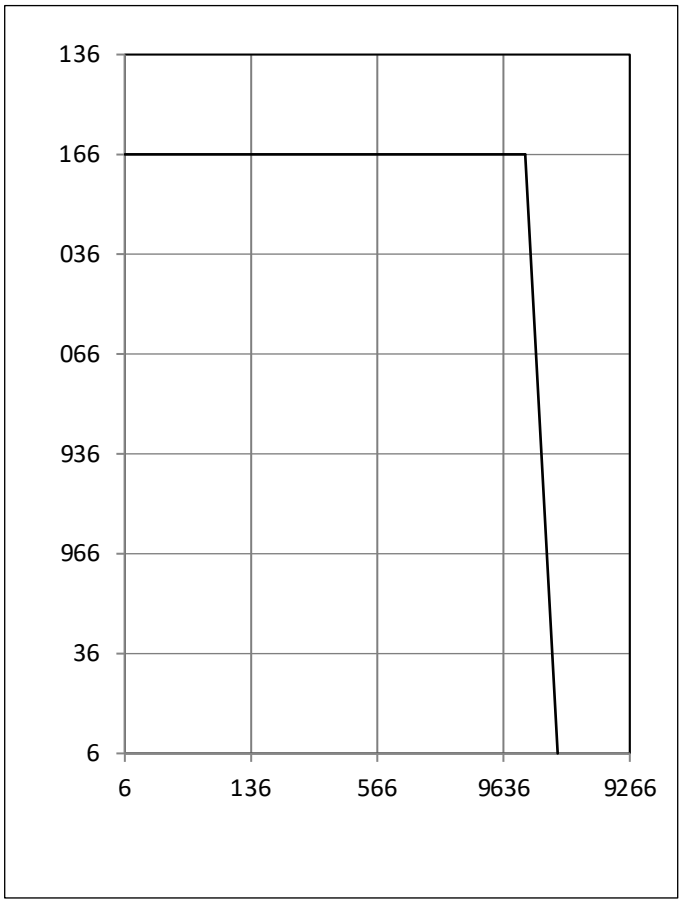
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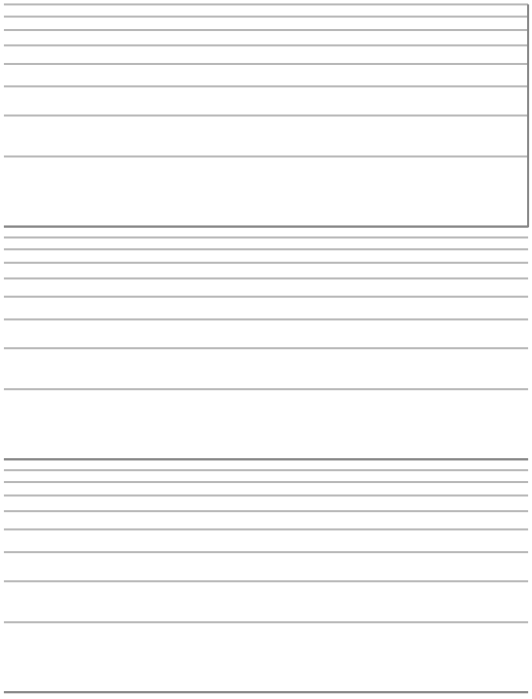

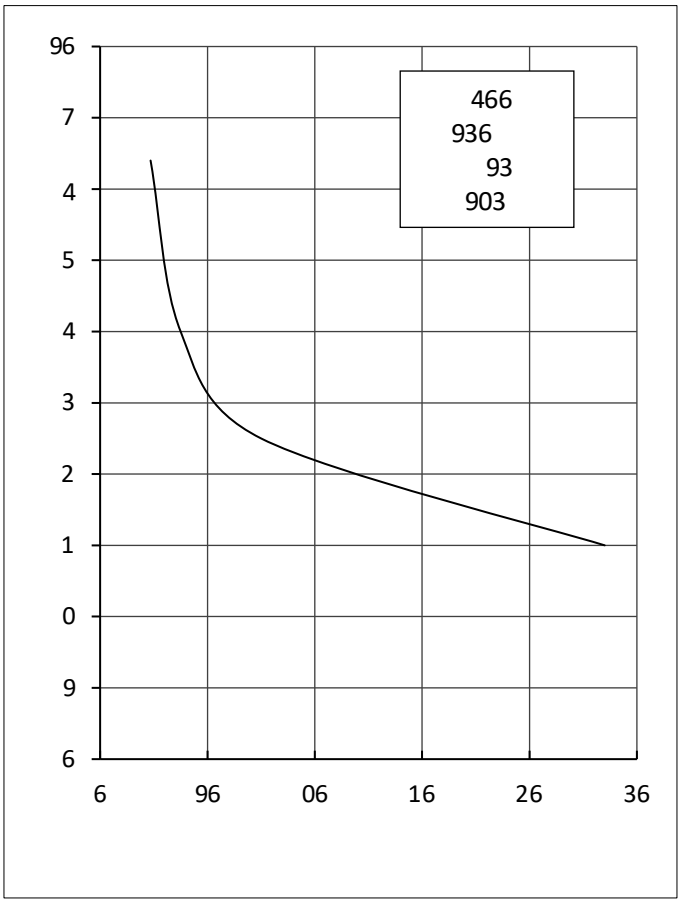
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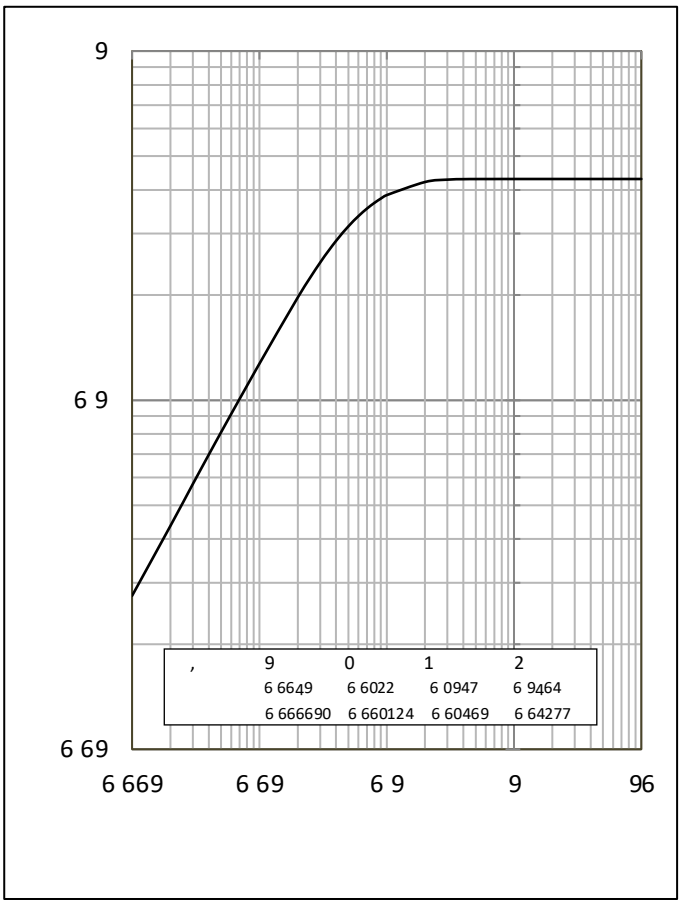
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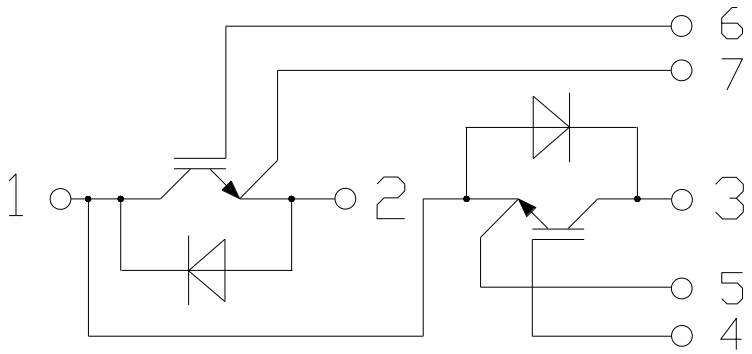
- **Circuit Diagram**



- **Package Outline Information**

Dimensions in Millimeters