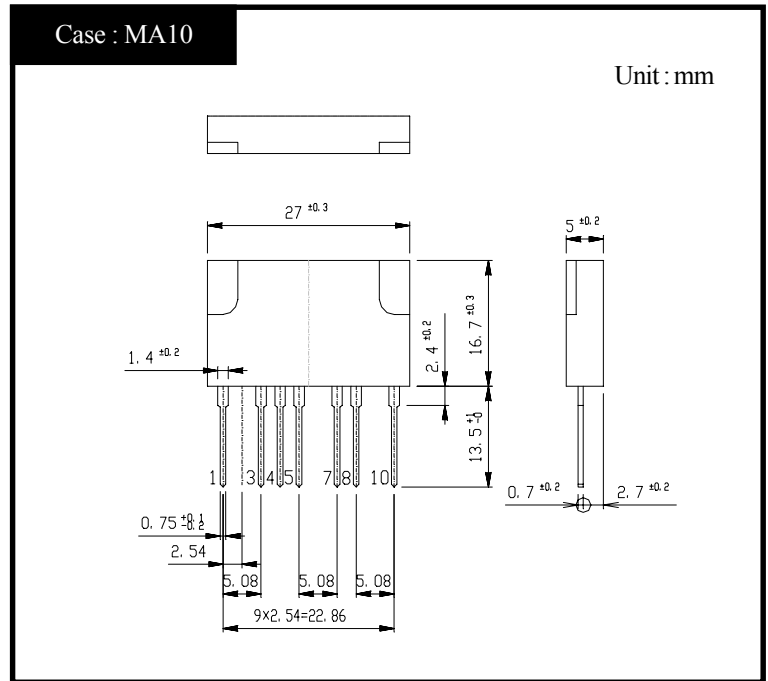


# MJ2400

## OUTLINE DIMENSIONS



## RATINGS

### Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings		Unit	
			Input Condition *1			
			AC100V	AC200V		
Storage Temperature	Tstg		-30~150		°C	
Junction Temperature	Tj		135	110	°C	
Maximum Reverse Voltage	V <sub>RM</sub>	⑧-①,⑧-⑩,①-④,⑩-④,⑦-①,⑦-⑩	600		V	
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	④-③ R <sub>GK</sub> =1kΩ	200	400	V	
Non-repetitive Peak Reverse Voltage	V <sub>RSM</sub>	④-③ R <sub>GK</sub> =1kΩ	300	500	V	
Repetitive Off-state Voltage	V <sub>DRM</sub>	③-④ R <sub>GK</sub> =1kΩ	200	400	V	
Non-repetitive Off-state Voltage	V <sub>DSM</sub>	③-④ R <sub>GK</sub> =1kΩ	300	500	V	
Average Rectified Forward Current	I <sub>O</sub>	Sine Wave 50Hz Resistance Load (⑧-③)	Heatsink			
			T <sub>a</sub> =25°C	1.6	1.24	A
			T <sub>c</sub> =106°C	3.4	-	A
		T <sub>c</sub> =95°C	-	1.9	A	
Peak Surge Forward Current	I <sub>FSM</sub>	Sine Wave 50Hz 1Cycle ①-⑩ (⑧-③)Short,⑤-④)Forward Bias)	80		A	
Peak Gate Forward Current	I <sub>FGM</sub>	50HZ,duty ≤ 10%,⑤-④	0.7		A	
Critical Rate Of Rise On-state Voltage	di <sub>T</sub> /dt	③-④	50		A/μs	
Dielectric Strength	V <sub>dis</sub>	Terminals To Case AC 1 min	2		kV	

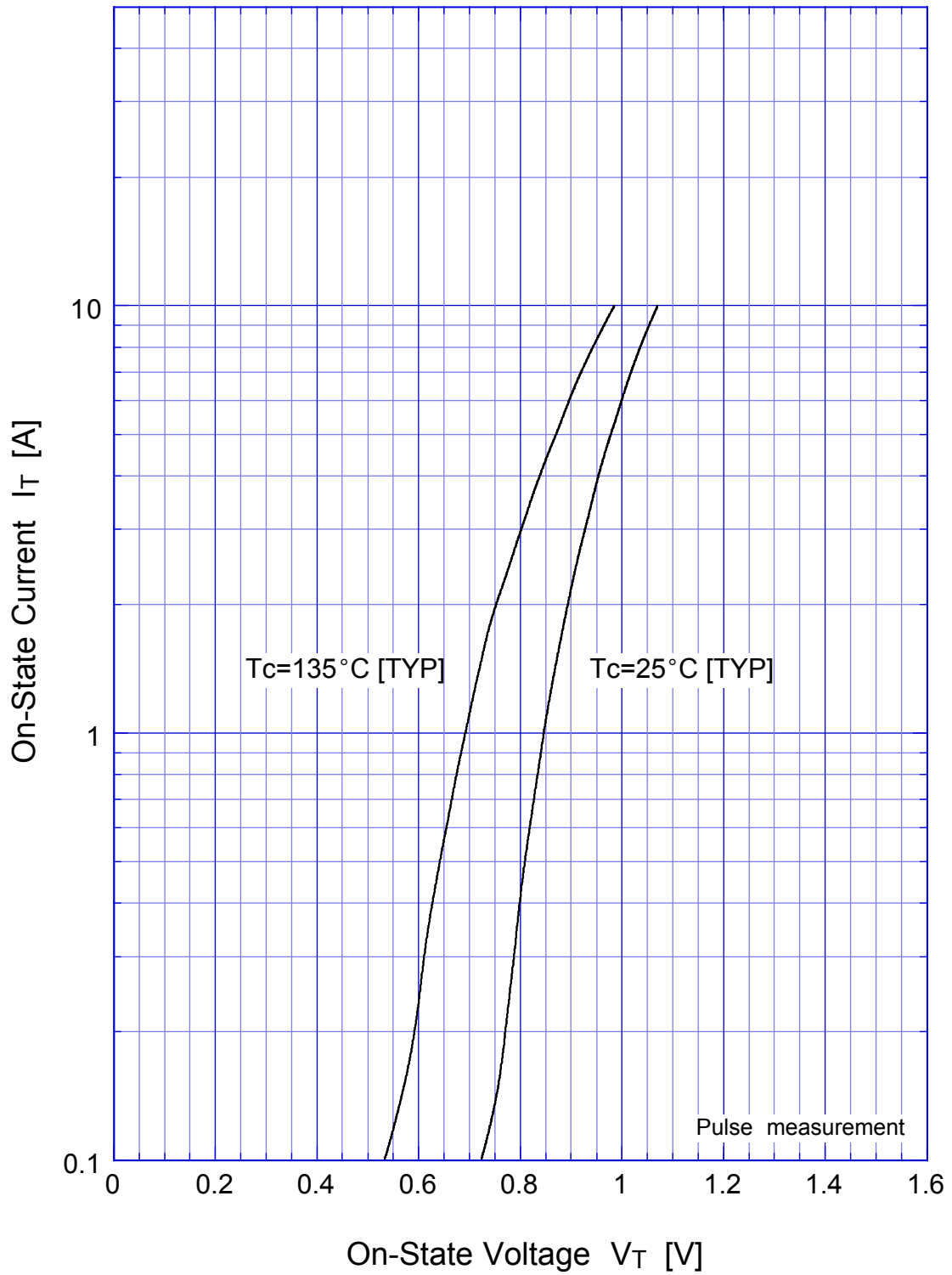
### Electrical Characteristics (T<sub>c</sub>=25°C)

Item	Symbol	Conditions	Ratings		Unit
			Input Condition *1		
			AC100V	AC200V	
Di	Reverse Current	I <sub>R</sub>	V <sub>R</sub> =600V,⑧-①,⑧-⑩,①-④,⑩-④,⑦-①,⑦-⑩		μA
	Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =2A,①-⑧,⑩-⑧,④-①,④-⑩,①-⑦,⑩-⑦		V
SCR	Repetitive Peak Reverse Current	I <sub>RRM</sub>	V <sub>RR</sub> =400V,④-③ R <sub>GK</sub> =1kΩ		μA
	Off-state Current	I <sub>DRM</sub>	V <sub>DR</sub> =400V,③-④ R <sub>GK</sub> =1kΩ		μA
	On-state Voltage	V <sub>T</sub>	I <sub>T</sub> =3.4A, ③-④ R <sub>GK</sub> =1kΩ		V
	Gate-Trigger Current	I <sub>GT</sub>	V <sub>D</sub> =6V,R <sub>i</sub> =20kΩ R <sub>GK</sub> =1kΩ		mA
	Gate-Trigger Voltage	V <sub>GT</sub>	V <sub>D</sub> =6V,R <sub>i</sub> =20kΩ R <sub>GK</sub> =1kΩ		V
	Gate-Non-Trigger Voltage	V <sub>GD</sub>	V <sub>D</sub> =200V		V
Thermal Resistance	θ <sub>ja</sub>	Junction to Ambient	MIN 27		°C/W
	θ <sub>jc</sub>	Junction to Case	MIN 2.9		°C/W
	θ <sub>jL</sub>	Junction to Lead	MIN 8		°C/W

Figure in ○=Terminal Sign

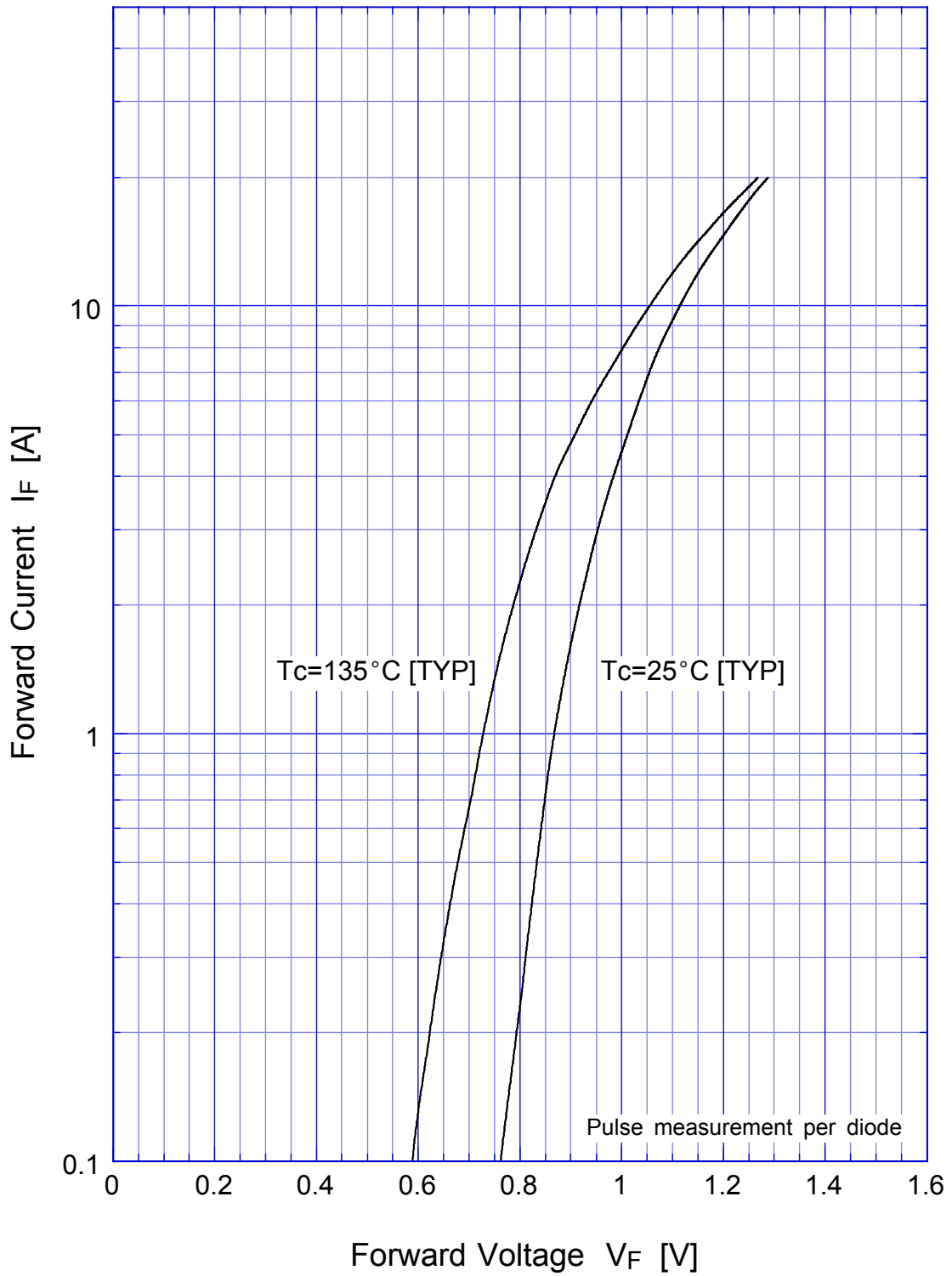
AC100V:90to132V AC200V:180to276V

# MJ2400 Thyristor Forward Voltage

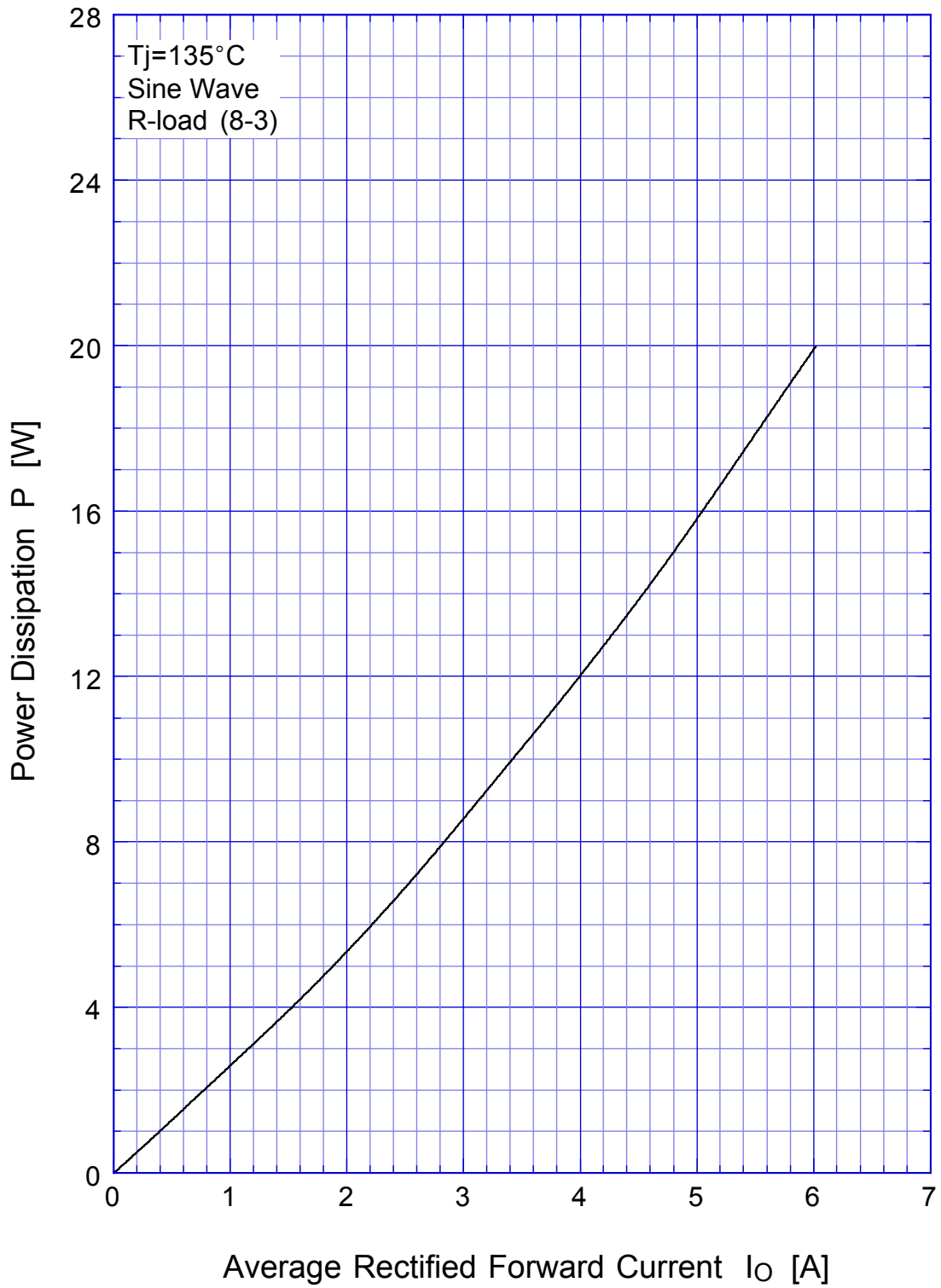


# MJ2400

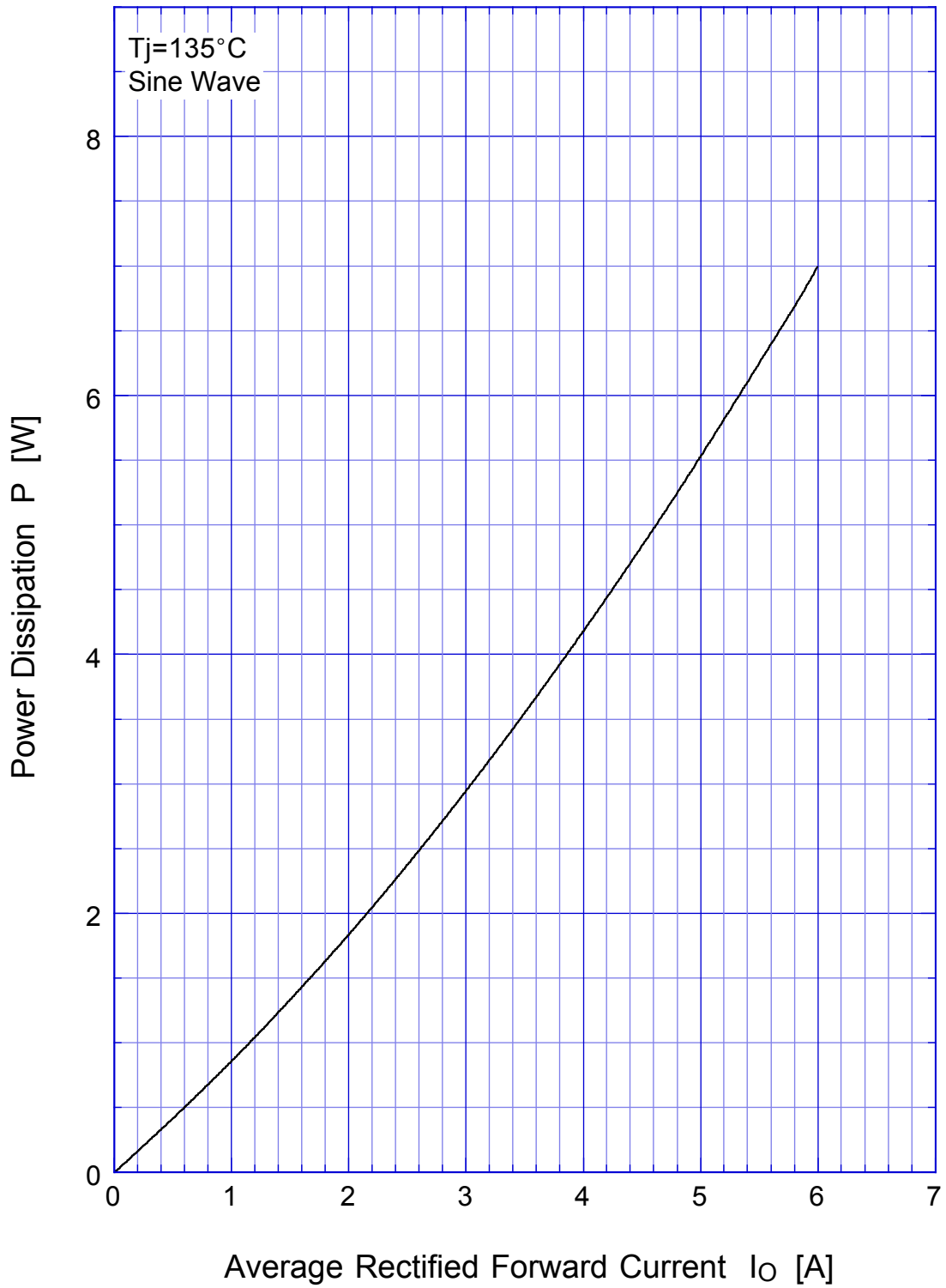
# Diode Forward Voltage



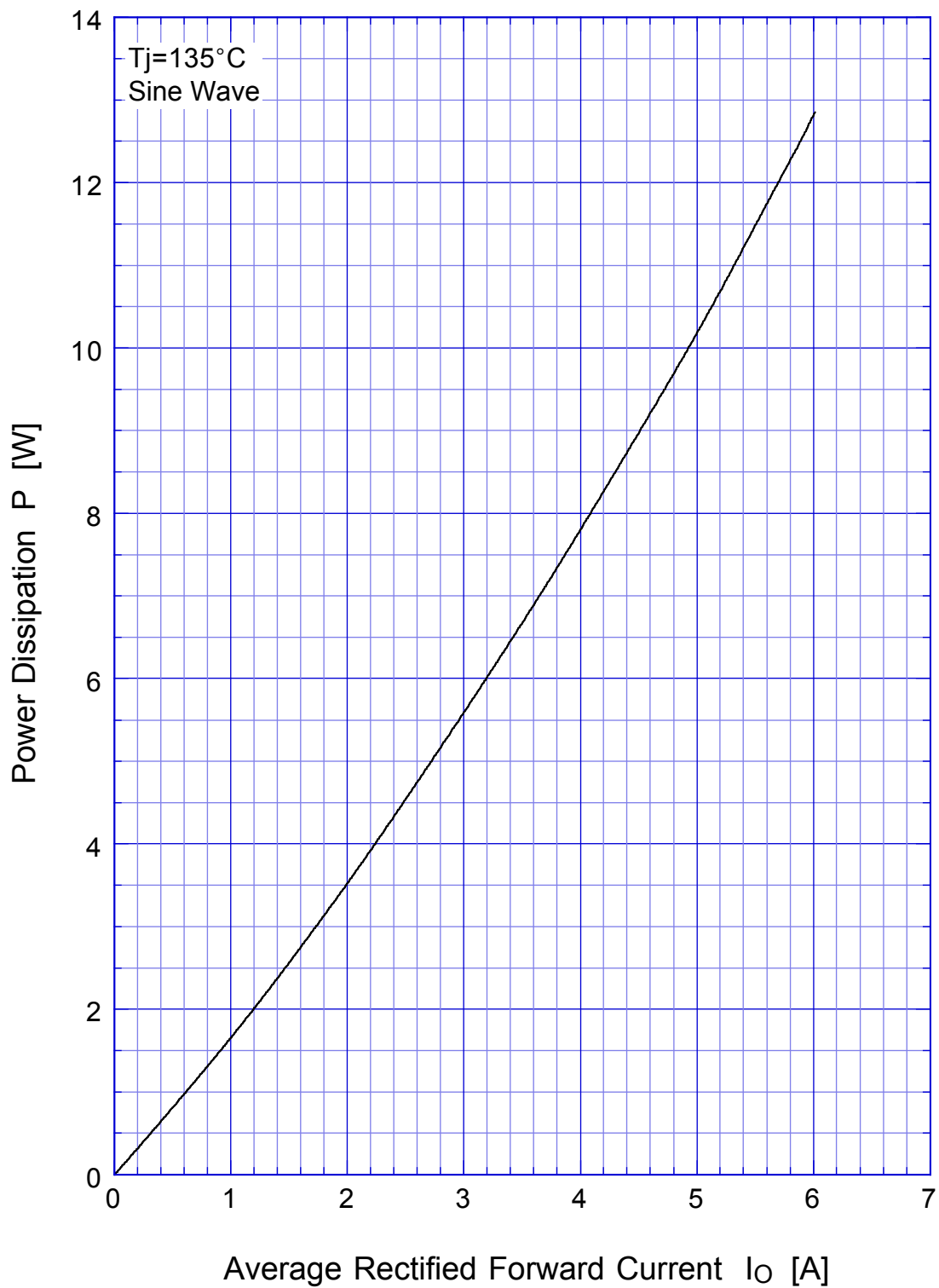
# MJ2400 Total Forward Power Dissipation



## MJ2400 Thyristor Forward Power Dissipation

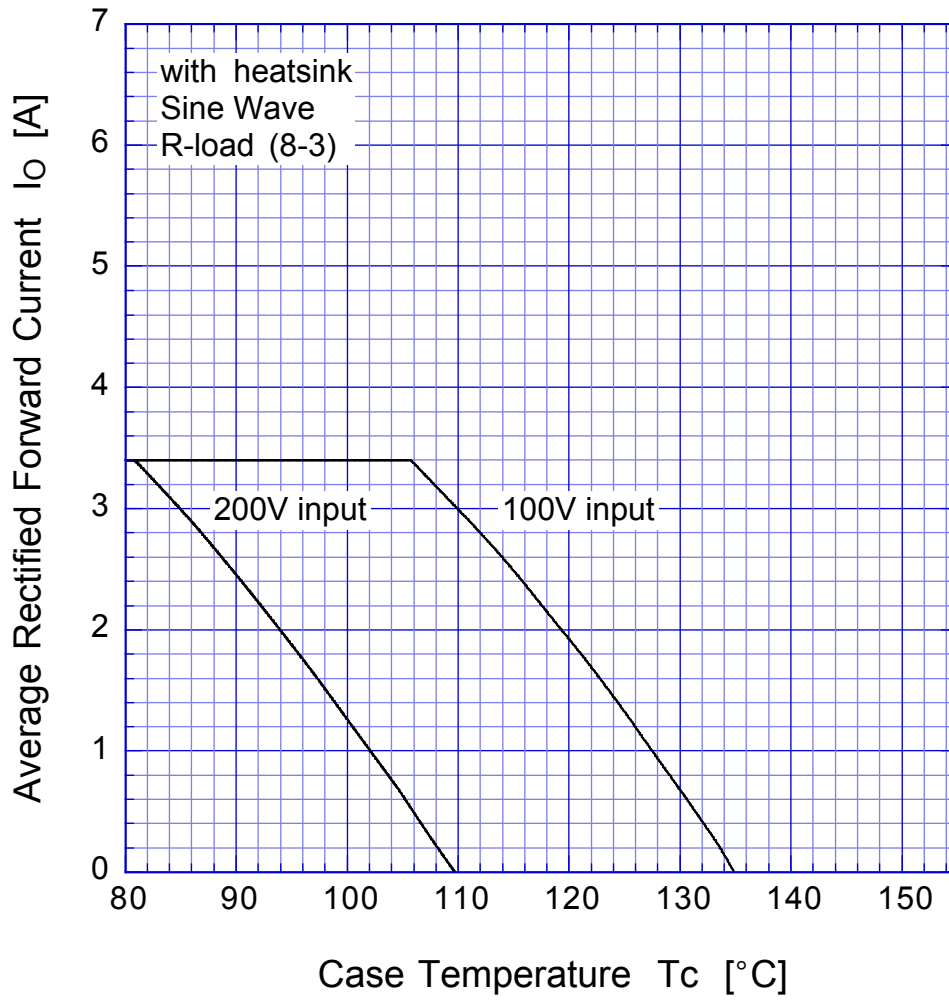


## MJ2400 Bridge Diode Forward Power Dissipation



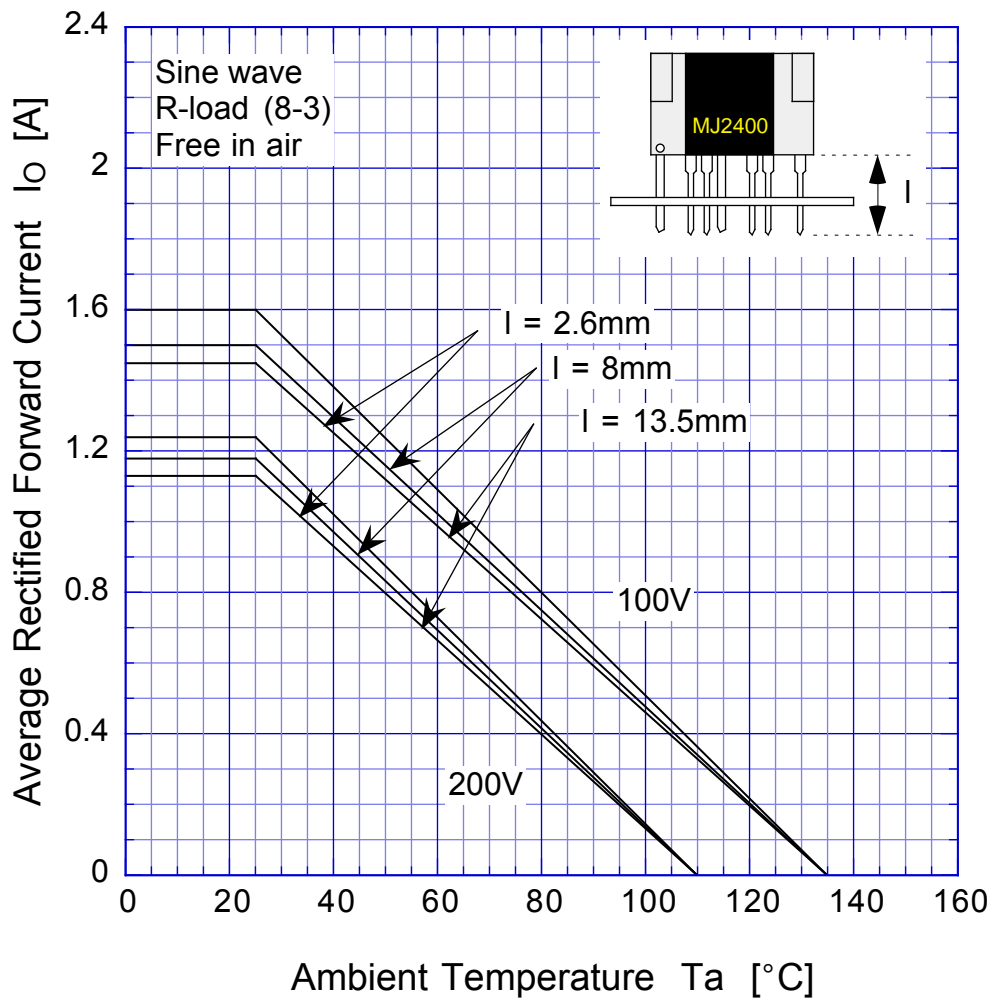
# MJ2400

# Derating Curve



# MJ2400

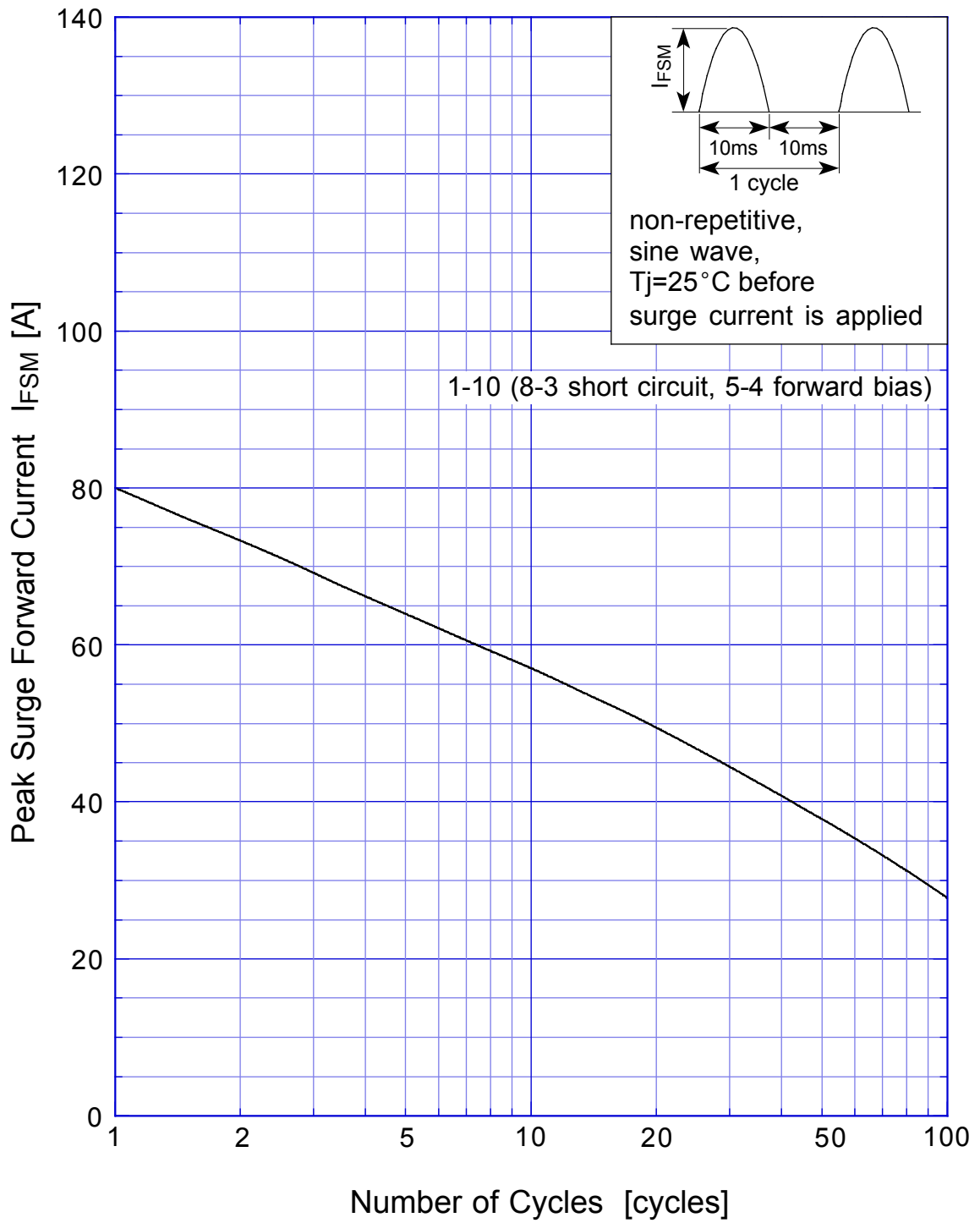
# Derating Curve



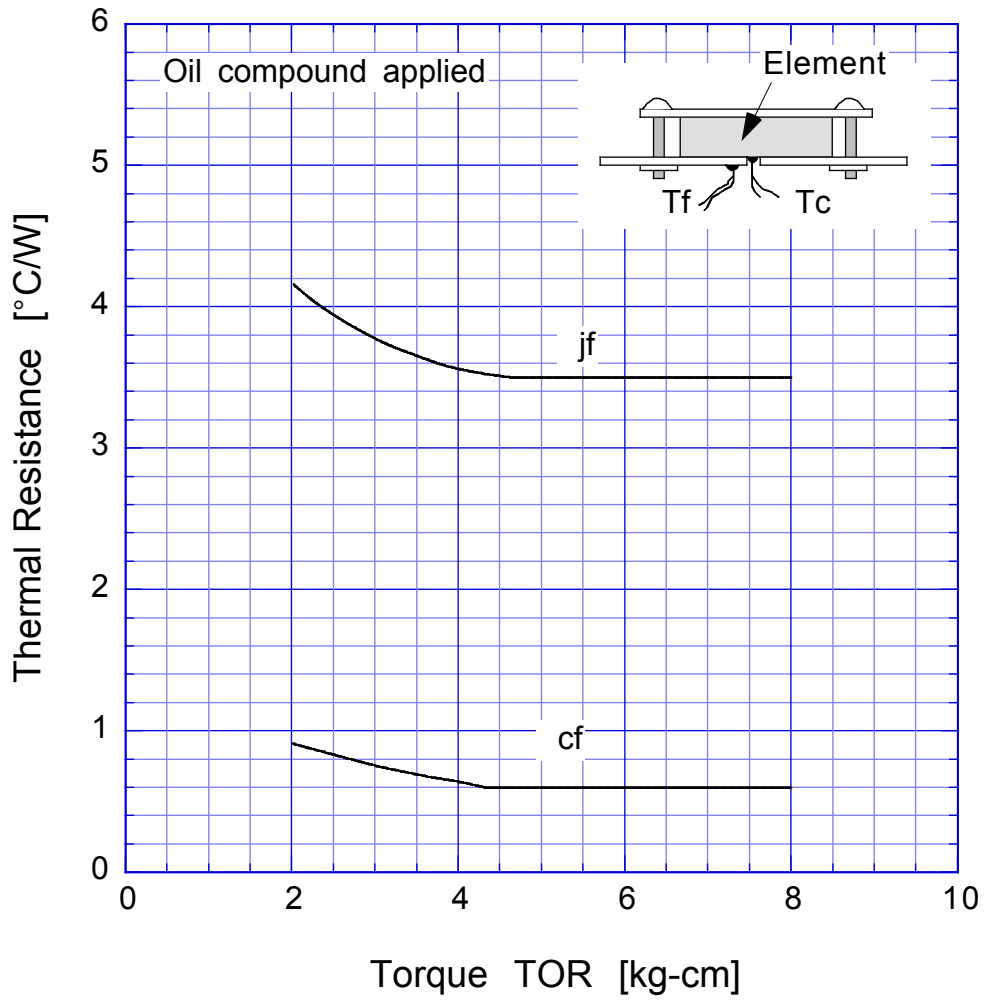


# MJ2400

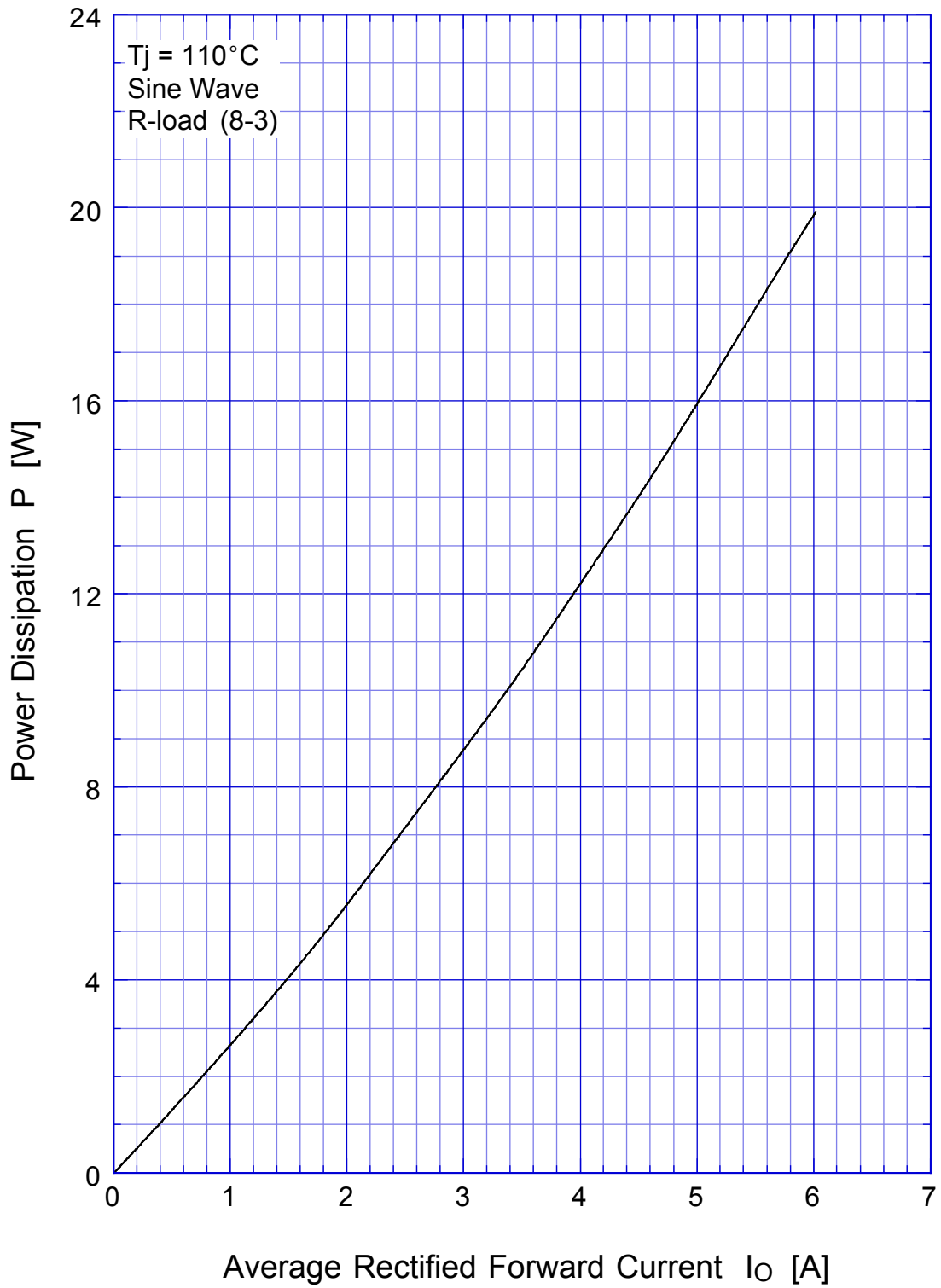
## Peak Surge Forward Capability



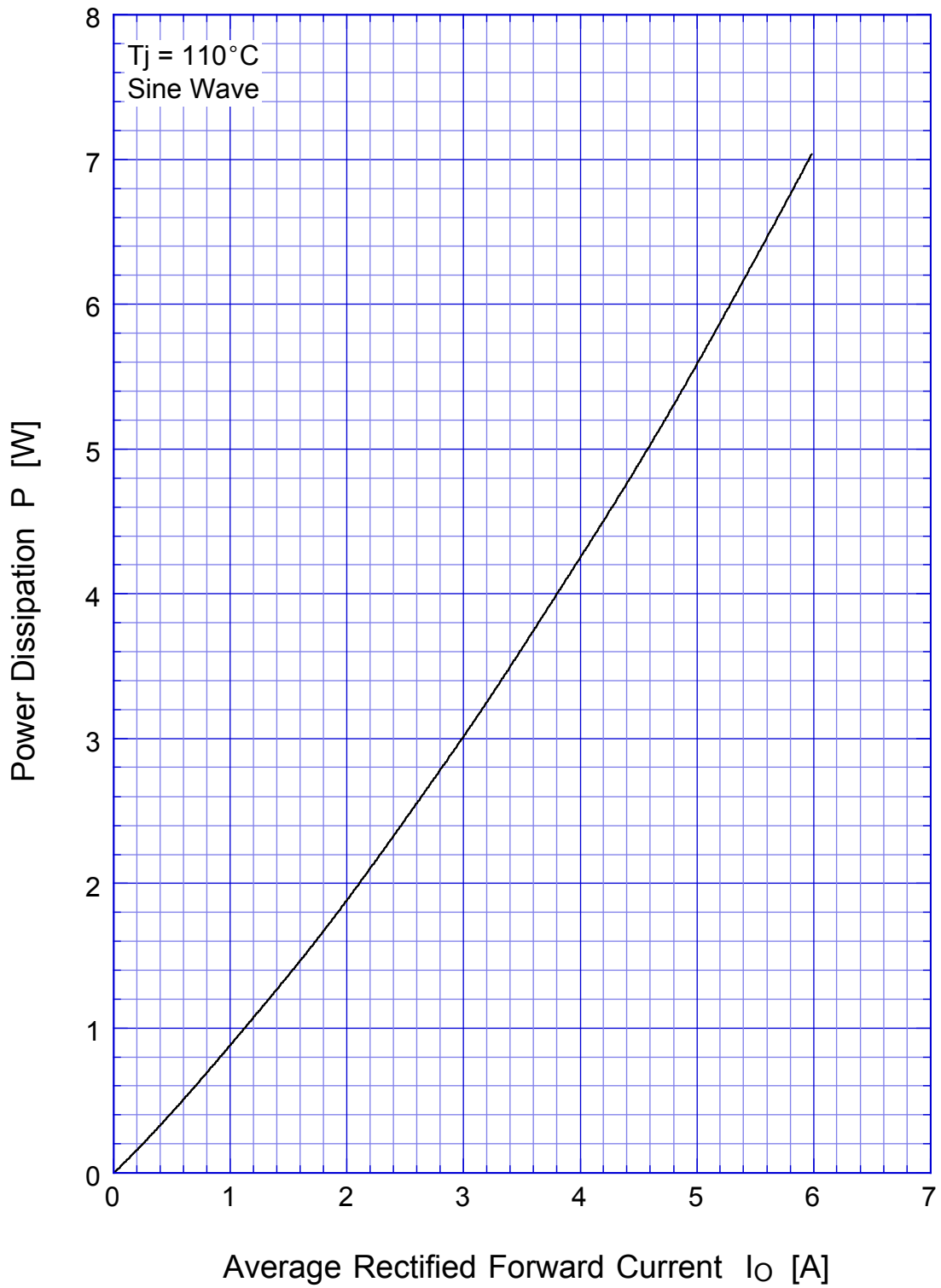
# MJ2400 Torque - Thermal Resistance



## MJ2400 Total Forward Power Dissipation



## MJ2400 Thyristor Forward Power Dissipation



## MJ2400 Bridge Diode Forward Power Dissipation

