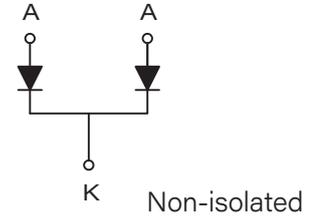


Fast Recovery Diode Module (2 in 1)

“Techno Block” series
DKR400CA60 (400A / 600V)



Applications

- ▶ Welding machines
- ▶ Plasma cutting machines
- ▶ Plating equipment

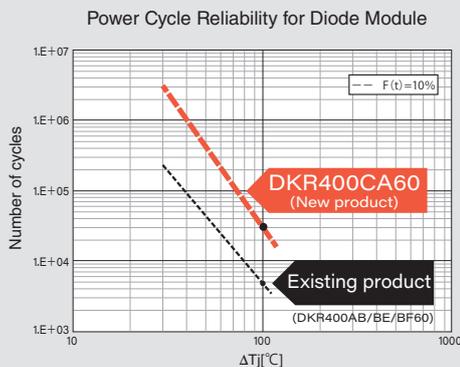


Features

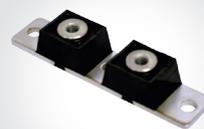
“Techno Block” is our original semiconductor package that use transfer molding and both side solder process, achieving small footprint and excellent heat dissipation

High power cycle reliability

Power cycle reliability is five times better than the one of our existing product (@ $\Delta T_j = 100^\circ\text{C}$)



Light and compact



existing product



10% lighter



DKR400CA60

High temperature operation

Operates at high T_j
(up to 150°C)

Maximum Ratings

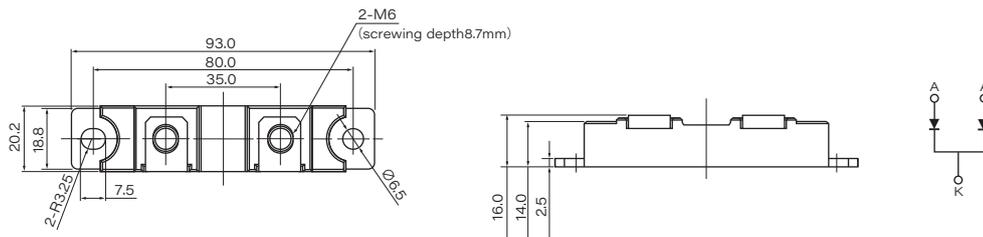
Tj=25°C unless otherwise specified

Item	Symbol	Unit	Ratings	Conditions	
Repetitive Peak Reverse Voltage	V _{RRM}	V	600		
DC Reverse Voltage	V _{R(DC)}	V	480		
Forward Current	Per Module	I _F	A	400	DC T _c =105°C
	Per Leg			200	DC T _c =105°C
Surge Forward Current	I _{FSM}	A	5100/5600	1/2cycle, 50/60Hz, Peak value, Non-repetitive	
I ² t (for fusing)	I ² t	A ² s	130000	Value for one cycle of surge current	
Operating Junction Temperature	T _j	°C	-40 to +150		
Storage Temperature	T _{stg}	°C	-40 to +125		
Mounting Torque	Mounting (M6)	N·m	4.7	Recommended value 2.5 to 3.9	
	Terminal (M6)		4.7	Recommended value 2.5 to 3.9	
Mass		g	71		

Electrical Characteristics

Tj=25°C unless otherwise specified

Item	Symbol	Unit	Ratings			Conditions
			Min.	Typ.	Max.	
Repetitive Peak Reverse Current	I _{RRM}	mA			200	T _j =125°C, V _R =V _{RRM}
Forward Voltage Drop	Per Module	V _{FM}	V	1.40	1.60	I _{FM} =400A, Inst. measurement
	Per Leg			1.40	1.60	I _{FM} =200A, Inst. measurement
Reverse Recovery Time	Per Module	t _{rr}	ns	120	200	I _F =400A, -di/dt=400A/μs
	Per Leg			120	200	I _F =200A, -di/dt=200A/μs
Thermal Resistance	Per Leg	R _{th(j-c)}	°C/W		0.14	Junction to Case



Unit : mm

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- Appearance and specifications of products are subject to change without notice for improvement reasons.

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