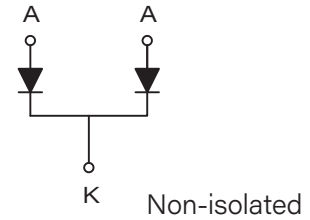


Fast Recovery Diode Module (2 in 1)

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



Applications

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

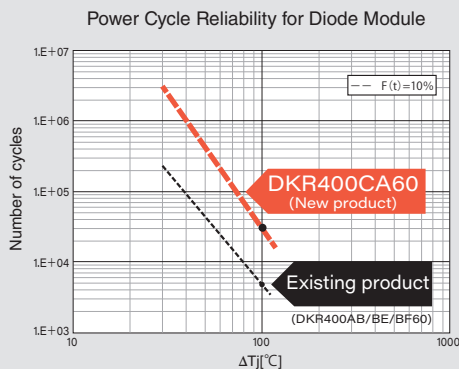


Features

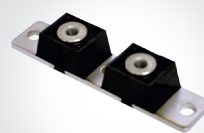
“Techno Block” is our original semiconductor package that use transfer molding and both side solder process, achieving small footprint and excellent heat dissipation

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

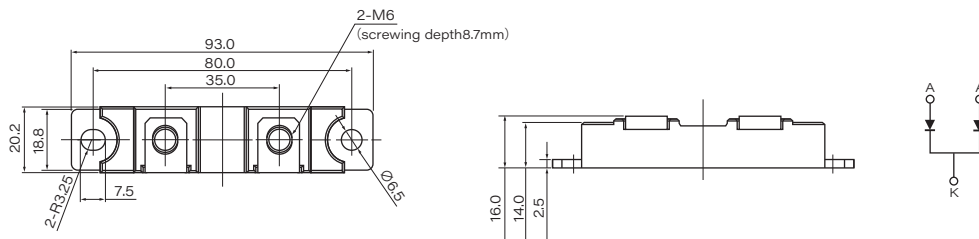
Tj=25°C unless otherwise specified

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

- SanRex and Techno Block are trademarks or registered trademarks of Sansha Electric Manufacturing Co., Ltd.
- Appearance and specifications of products are subject to change without notice for improvement reasons.

SANSHA ELECTRIC MFG. CO., LTD.



URL: <https://www.sansha.co.jp/>

Head Office
(International Sales Department)
Tokyo Branch
Chubu Sales Office
Kyushu Sales Office
Hokuriku Office

TEL: +81-6-6325-6621 FAX: +81-6-6325-0503
TEL: +81-3-3834-1700 FAX: +81-3-3834-1702
TEL: +81-52-955-5600 FAX: +81-52-955-5650
TEL: +81-92-431-7586 FAX: +81-92-474-9643
TEL: +81-76-293-1725 FAX: +81-76-293-1881

Helsinki Branch (Finland)
Atomitie 5, Helsinki, 00370, Finland
TEL: +358-40-1668580 E-mail: info@sanrex.fi
Seoul Branch (Korea)
#706, 6, Samseong-ro 96-gil, Gangnam-gu Seoul
06168 Korea
TEL: +82-2-552-2803 FAX: +82-2-552-8441
Taipei Branch (Taiwan)
8F-3, No.46, Chung Shan N. Road, Sec. 2, Taipei,
Taiwan, R.O.C.
TEL: +886-2-2543-5689 FAX: +886-2-2536-7876

SANSHA SOLUTION SERVICE CO., LTD. (Japan)
TEL: +81-6-6321-0616 FAX: +81-6-6321-0618
Service branches: Osaka, Tokyo, Nagoya, Fukuoka
SUWA SANSHA ELECTRIC CO., LTD. (Japan)
TEL: +81-266-82-6600 FAX: +81-266-73-3322
<https://www.suwa.sansha.co.jp/>
SANREX CORPORATION (U.S.A.)
TEL: +1-516-625-1313 FAX: +1-516-625-8845
<https://www.sanrex.com/>
SANREX ASIA PACIFIC PTE. LTD. (Singapore)
TEL: +65-6457-8867 FAX: +65-6459-6425
<https://www.sanrex.sg/>

SANREX LIMITED (Hong Kong)
TEL: +852-2744-1310 FAX: +852-2785-6009
SANSHA ELECTRIC MFG. (SHANGHAI) CO., LTD. (China)
TEL: +86-21-5868-1058 FAX: +86-21-5868-1056
SANSHA ELECTRIC MFG. (GUANGDONG) CO., LTD. (China)
TEL: +86-757-2733-3688 FAX: +86-757-2783-3547
<http://www.sanrex.cn/>
DONGGUAN EASTERN ELECTRONICS CO., LTD. (China)
TEL: +86-769-8733-8301 FAX: +86-769-8733-8306