

SCHOTTKY DIODE MODULE(NON-ISOLATED TYPE)

BKR400ABZ50

Power Schottky Diode Module **BKR400AAZ50** is designed for various rectifier circuits.

BKR400AAZ50 is suitable for high power application requiring low loss.

● Low V_{FM} 0.57V ($I_F=400A$)

● $I_{F(AV)}=200A$ (each device)

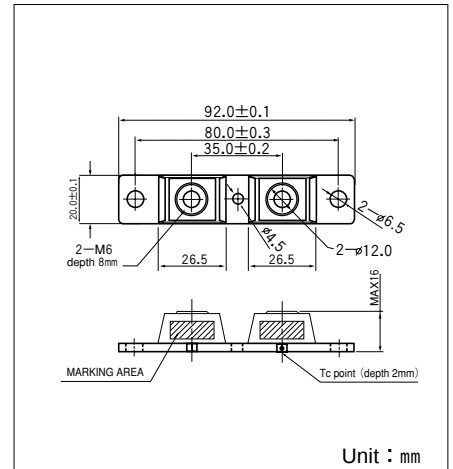
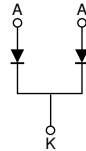
● $V_{RRM}=50V$

● High Surge Capability

(Applications)

Switching Power Supply, Power Supply for Metal Surface Treatment

Power Supply for Telecommunication



Maximum Ratings

($T_j=25^\circ C$ unless otherwise specified)

Symbol	Item	Ratings	Unit
		BKR400ABZ50	
V_{RRM}	Repetitive peak reverse Voltage	50	V

Symbol	Item		Condition	Ratings	Unit
I _{F(AV)}	Forward Current	Per module	D.C. T _c =121℃	400	A
		Per leg		200	
I _{FMS}	Surge Forward Current		1/2cycle, 60Hz, Peak value. non-repetitive	7600	A
			1/2cycle, 50Hz, Peak value. non-repetitive	6920	
I ² t	I ² t (for fusing)			240000	A ² s
E _{AS}	Single Pulse Avalanche Energy (Per Leg)		I _{AS} =60A, L=160μH	320	mJ
T _j	Operating Junction Temperature			−40 to +150	℃
T _{stg}	Storage Temperature			−40 to +125	℃
	Mounting Torque	Mounting (M6)	Recommended value 25-40	48	(kgf•cm)
			Recommended value 2.5-3.9	4.7	N•m
		Mounting (M4)	Recommended value 10-14	15	(kgf•cm)
			Recommended value 1.0-1.4	1.5	N•m
		Terminal (M6)	Recommended value 25-40	48	(kgf•cm)
			Recommended value 2.5-3.9	4.7	N•m
	Mass		Typical value	78	g

Electrical Characteristics

Symbol	Item	Condition	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current	$T_j=125^\circ C$, $V_R=50V$, Pulse Width $<300\mu s$, Duty $<2\%$	2000	mA
V_{FM}	Forward Voltage Drop	$I_F=400A$	0.57	V
		$I_F=800A$	0.73	
		$I_F=400A$, $T_j=125^\circ C$	0.52	
		$I_F=800A$, $T_j=125^\circ C$	0.68	
$R_{th(j-c)}$	Thermal Impedance	Junction to case, $\frac{1}{2}$ module	0.1	$^\circ C/W$

