

SCHOTTKY DIODE MODULE (NON-ISOLATED TYPE)

BKR400ABZ50

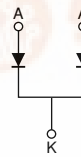
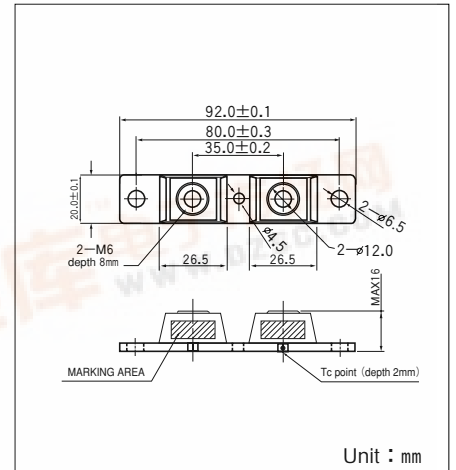
Power Schottky Diode Module **BKR400AAZ50** is designed for various rectifier circuits.

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)

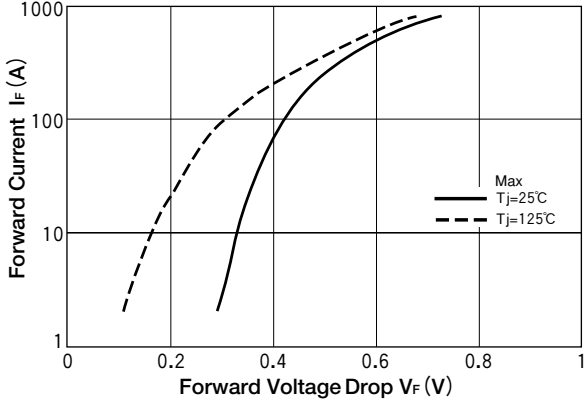
Symbol	Item	Ratings		Unit
		BKR400ABZ50		
V_{RRM}	Repetitive peak reverse Voltage	50		V

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

Electrical Characteristics

Symbol	Item	Condition	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current	$T_j=125^\circ C, V_R=50V, \text{Pulse Width} < 300\mu s, \text{Duty} < 2\%$	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, $1/2$ module	0.1	$^\circ C/W$

Forward Characteristics



Transient Thermal Impedance (1/2Module)

