SCHOTTKY DIODE MODULE (NON-ISOLATED TYPE)

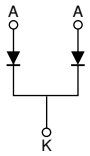
BKR400ABZ50

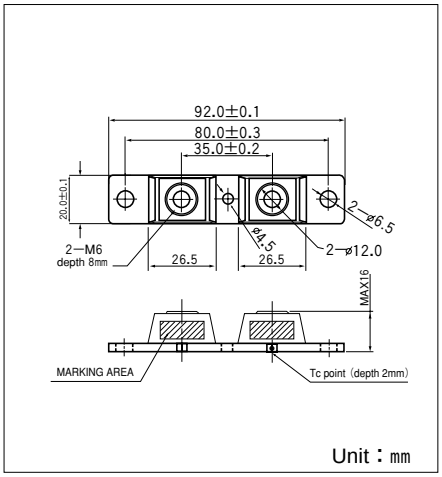
Power Schottky Diode Module **BKR400AAZ50** is designed for various rectifier circuits.
BKR400AAZ50 is suitable for high power application requiring low loss.

- 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

(Tj=25℃ 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^2t	I^2t (for fusing)			240000	A^2s
E_{AS}	Single Pulse Avalanche Energy (Per Leg)		I_{AS}=60A, L=160μH	320	mJ
Tj	Operating Junction Temperature			−40 to +150	℃
Tstg	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℃, V_R=50V, Pulse Width<300μs, 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℃	0.52	
		I_F=800A, T_j=125℃	0.68	
Rth(j-c)	Thermal Impedance	Junction to case, 1/2module	0.1	℃/W

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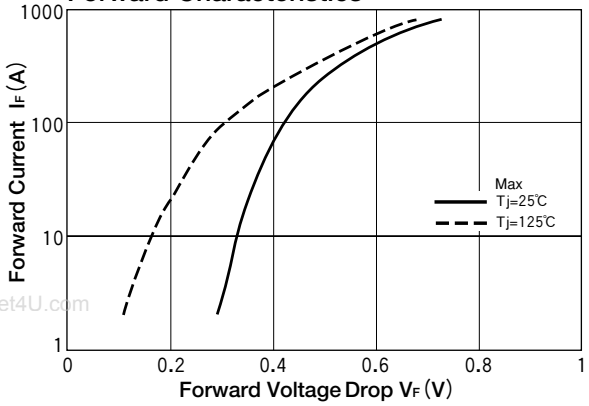
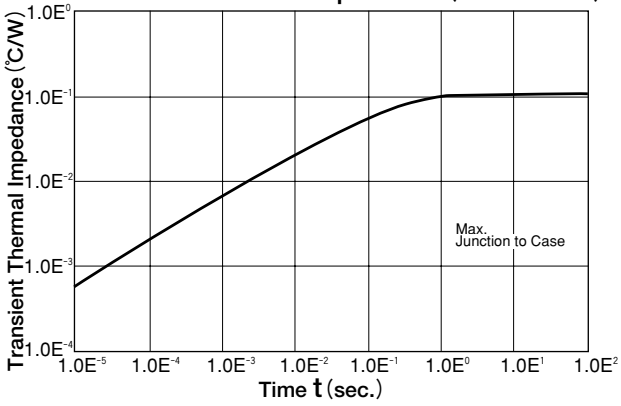
Forward Characteristics



Transient Thermal Impedance (1/2Module)



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