

## 200V/200A

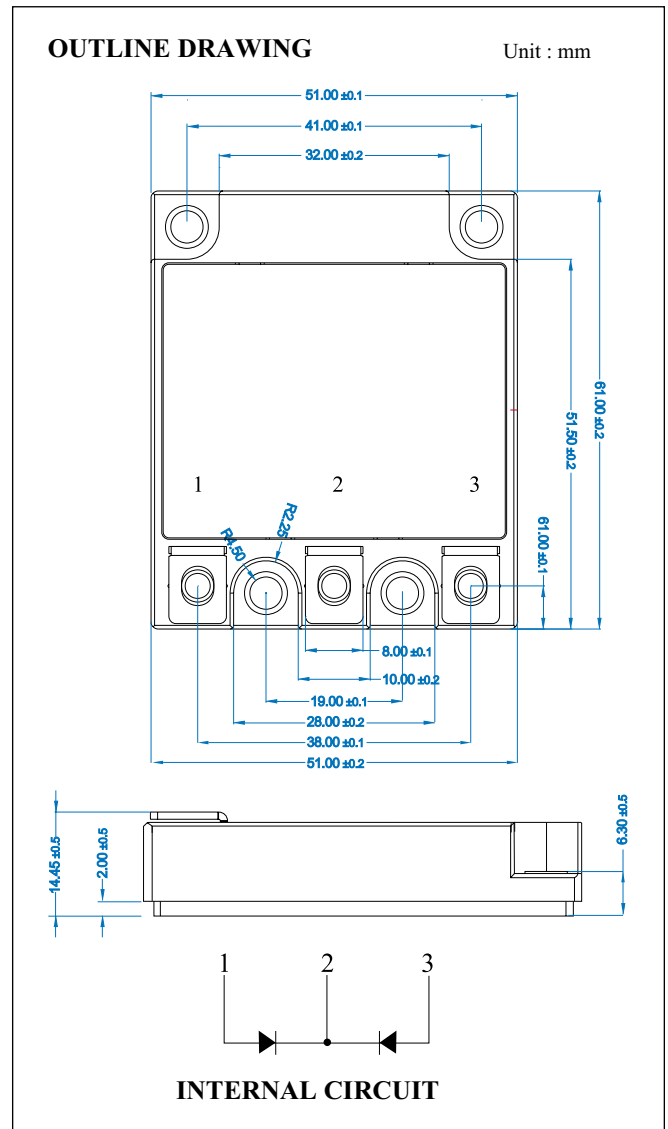
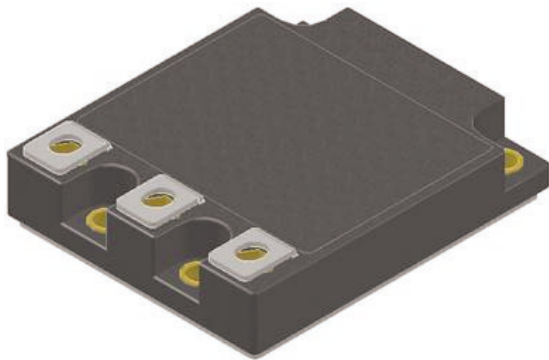
## 2-PACK DIODE MODULE (common-cathode)

### FEATURES

- Schottky Barrier Diode
- Low  $V_F$
- Low turn-off loss

### APPLICATION

- General purpose converter
- Optimized for HEV low voltage DC-DC converter



### MAXIMUM RATING (@T<sub>j</sub>=25 Per Leg)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Maximum D.C. Reverse Voltage		$V_R$	200	V
Maximum Peak Repetitive Reverse Voltage		$V_{RRM}$		
Maximum Working Peak Reverse Voltage		$V_{RWM}$		
Maximum Average Forward Current	$T_j=125$ , Duty Cycle =0.5	$I_{F(AV)}$	240	A
RMS Forward Current	Square wave, 50% duty	$I_{F(RMS)}$	600	
Non-Repetitive Forward Surge Current	$T_j=45$ , 8.3ms	$I_{FSM}$	2,000	
Storage Temperature Range		$T_{STG}$	-55 to 150	
Maximum Operating Junction temperature		$T_j$	150	
Weight of Module		Weight	125	g
Mounting torque with screw : M4		Md	2.0	N.m
Terminal Connection torque : M4			2.0	N.m

# DM200CK02AS

## STATIC CHARACTERISTICS (@T<sub>j</sub>=25 Unless otherwise specified)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 100A	-	0.85	-	V
		I <sub>F</sub> = 200A	-	1	1.26	
		I <sub>F</sub> = 200A @T <sub>j</sub> = 150	-	0.9	-	
		I <sub>F</sub> = 400A	-	1.5	-	
Maximum Reverse Leakage Current	I <sub>RM</sub>	V <sub>R</sub> = 200V	-	-	0.5	mA
		V <sub>R</sub> = 200V @T <sub>j</sub> = 125	-	-	10	

## ELECTRICAL CHARACTERISTICS (@T<sub>j</sub>=25 Per Leg, Unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = 100A, di/dt = -200A/us V <sub>R</sub> = 60V, T <sub>j</sub> = 25	-	117	-	ns
Reverse Recovery charge	Q <sub>rr</sub>		-	558	-	uC
Maximum Reverse Recovery Current	I <sub>RRM</sub>		-	12	-	A

## THERMAL CHARACTERISTIC

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX.	UNIT
Junction - to - Case Thermal Resistance (AL203)	R <sub>th(j-c)</sub>	-	0.2	-	/W
Junction - to - Case Thermal Resistance (ALN)	R <sub>th(j-c)</sub>	-	0.12	-	

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Fig 1. Forward Voltage Characteristics

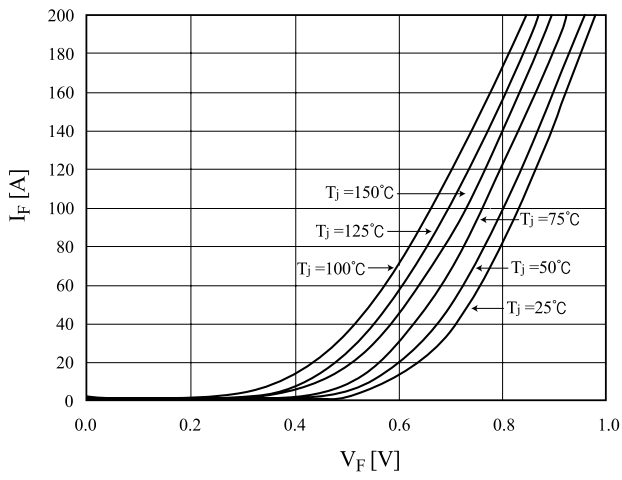


Fig 2. Reverse Current Characteristics

