

# HIGH POWER DIODE

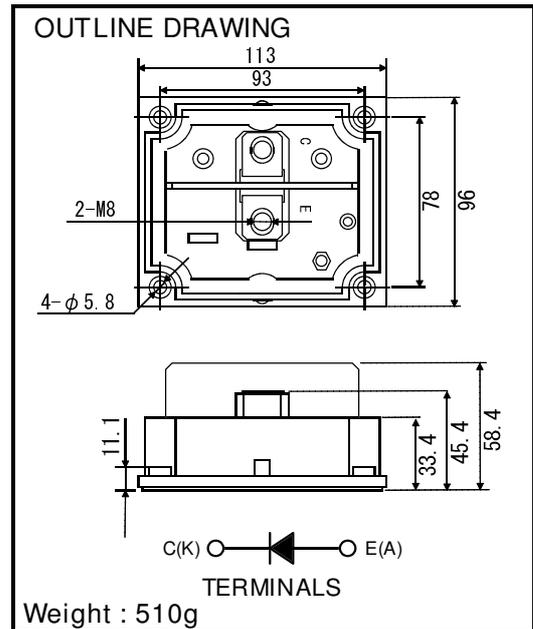
HITACHI



MDN1200D33

Spec.No.SR2-SP-03010 R1

Unit in mm



## FEATURES

- Low noise due to soft and fast recovery diodes
- High reliability, high durability diodes
- Isolated heatsink (Terminals to base)
- High thermal fatigue durability  
( $\Delta T_c = 70K$ ,  $N > 30000$  cycles)

## MAXIMUM ALLOWABLE RATINGS ( $T_c = 25 \text{ degC}$ )

Items		Type		MDN1200D33
Repetitive Peak Reverse Voltage		$V_{RRM}$	V	3,300
Forward Current	DC	$I_F$	A	1,200
	1ms	$I_{FM}$	A	2,400
Junction Temperature		$T_j$	degC	-40 ~ +125
Storage Temperature		$T_{stg}$	degC	-40 ~ +125
Isolation Voltage		-	$V_{(RMS)}$	5,400(AC 1 minute)
Screw Torque	Terminals (M8)	-	N·m	7.4+/-0.5
	Mounting (M5)	-	N·m	2.6+/-0.2

## CHARACTERISTICS ( $T_c = 25 \text{ degC}$ )

Items	Symbols	Units	Min.	Typ.	Max.	Test Condition
Repetitive Reverse Current	$I_{RRM}$	mA	—	—	4.0	$V_R = 3300V$
Forward Voltage Drop	$V_F$	V	—	3.2	4.2	$I_F = 1200A$
Reverse Recovery Time	$t_{rr}$	$\mu s$	—	0.8	1.4	$T_j = 125 \text{ degC}$ , $V_D = 1650V$ , $I_F = 1200A$
Thermal Impedance	$R_{th(j-c)}$	K/W	—	—	0.017	Junction to case
	$R_{th(c-f)}$	K/W	—	0.016	—	Case to fin

\* Please contact our representatives at order.

\* For improvement, specifications are subject to change without notice.

\* Remarks : For actual application, please confirm this spec sheet is the newest revision.

# HITACHI POWER SEMICONDUCTORS

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