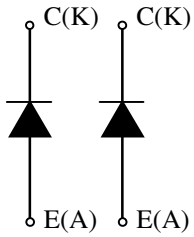
MDM900E17D

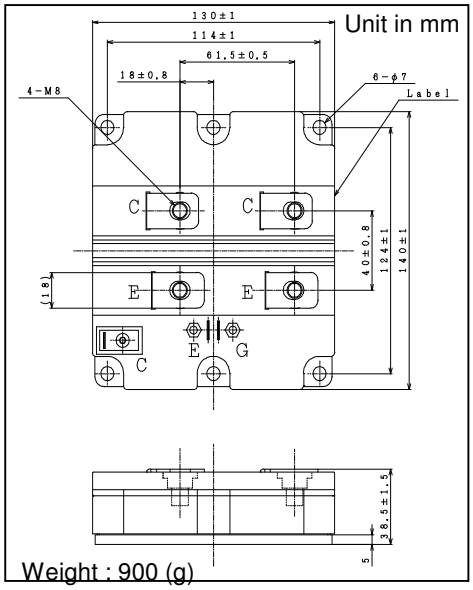
FEATURES

∗ Low noise due to soft and fast recovery diodes.
∗ High reliability, high durability diodes.
∗ Isolated heat sink(terminal to base).

CIRCUIT DIAGRAM



OUTLINE DRAWING



Weight : 900 (g)

ABSOLUTE MAXIMUM RATINGS (TC=25℃)

Item		Symbol	Unit	MDM900E17D
Repetitive Peak Reverse Voltage		V_{RRM}	V	1,700
Forward Current	DC	I_F	A	900
	1ms	I_{FM}		1,800
Junction Temperature		Tj	℃	-40 ～ +125
Storage Temperature		Tstg	℃	-40 ～ +125
Isolation Test Voltage		V_{ISO}	V_{RMS}	4,000(AC 1 minute)
Screw Torque	Terminals (M4/M8)	-	N·m	2/15 (1)
	Mounting (M6)	-		6 (2)

Notes: (1) Recommended Value 1.8±0.2/15+0/-3N·m (2) Recommended Value 5.5±0.5N·m

ELECTRICAL CHARECTERISTICS

Item	Symbol	Unit	Min.	Typ.	Max.	Test Conditions
Repetitive Reverse Current	I_{RRM}	mA	-	1.0	10.0	VAK=1,700V, Tj=125℃
Forward Voltage Drop	V_F	V	1.5	2.0	2.5	IF=900A, Tj=125℃ at chip level
Reverse Recovery Time	trr	μs	-	0.7	1.4	V_{CC}=900V, Ic=900A, L=100nH
Reverse Recovery Loss	$E_{rr(10\%)}$	J/P	-	0.4	0.7	Tj=125°C

PACKAGE CHARECTERISTICS

Item	Symbol	Unit	Min.	Typ.	Max.	Test Conditions
Terminal Resistance	RCE	mΩ	-	0.4	-	Tc=25°C
Terminal Stray Inductance	LsCE	nH	-	35	-	
Partial Discharge Extinction Voltage	Vex	Vrms	1.3	-	-	f=50Hz, Q<10pC
Thermal Impedance	Rth(j-c)	K/W	-	-	0.045	Junction to case
Comparative tracking index	CTI		-	600	-	
Contact Thermal Impedance	Rth(c-f)	K/W	-	0.008	-	Case to fin per module

* For improvement, specifications are subject to change without notice.
* For actual application, please confirm this spec sheet is the newest revision.
* Due to technical requirement, this product may contain restricted material for some application. Please contact our representatives.

HITACHI POWER SEMICONDUCTORS

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