

# High Voltage Rectifying Diode

## MD4CU4

● **Features**

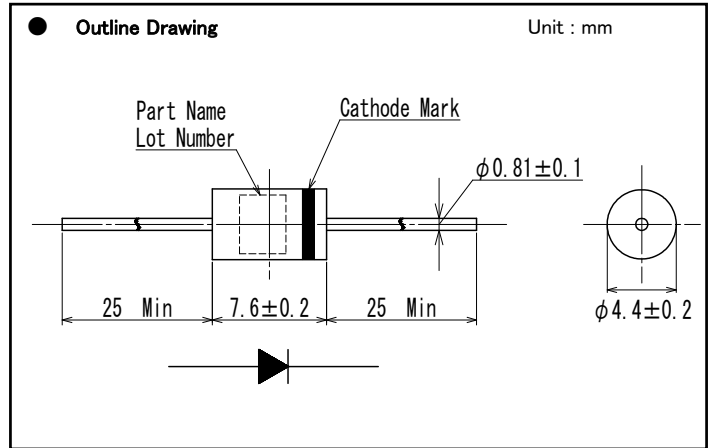
- VRM=4kV to 150kV
- Avalanche characteristics

● **Applications**

- Rectifier for High Frequency

● **Structures**

- Resin molded, and diffused junction silicon diode.
- Part Name : [ 4U4 ]
- Weight : 0.55g
- Terminal plating : Sn
- Conforms to RoHS regulations



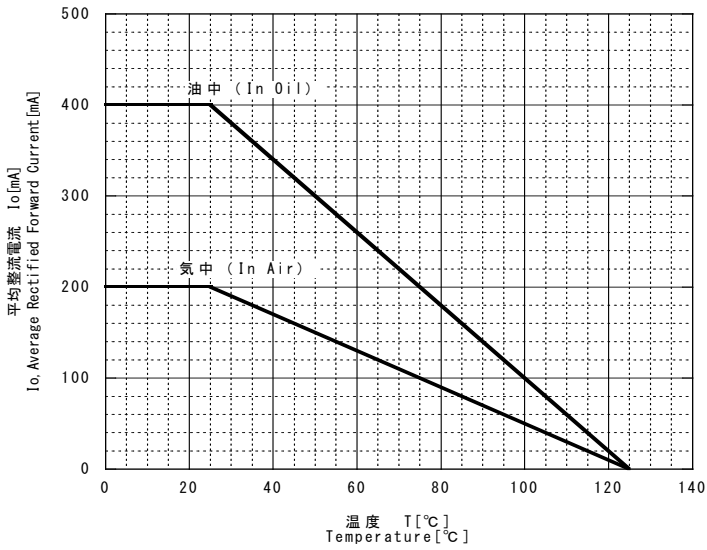
● **Absolute Maximum Ratings**

Items	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RM}$	In Oil	4	kV
		In Air	4	
Average Rectified Forward Current	$I_O$	In Oil $T_o=25^\circ\text{C}$ , 50Hz,Single-phase,Half sin Wave	400	mA
		In Air $T_a=25^\circ\text{C}$ , 50Hz,Single-phase,Half sin Wave	200	
Peak Forward Surge Current	$I_{SM}$	$T_a=25^\circ\text{C}$ , 50Hz,Half sin wave, Peak, Non-Repetitive	20	A
Operating Junction Temperature	$T_j$	—	-30~+125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	—	-30~+125	$^\circ\text{C}$

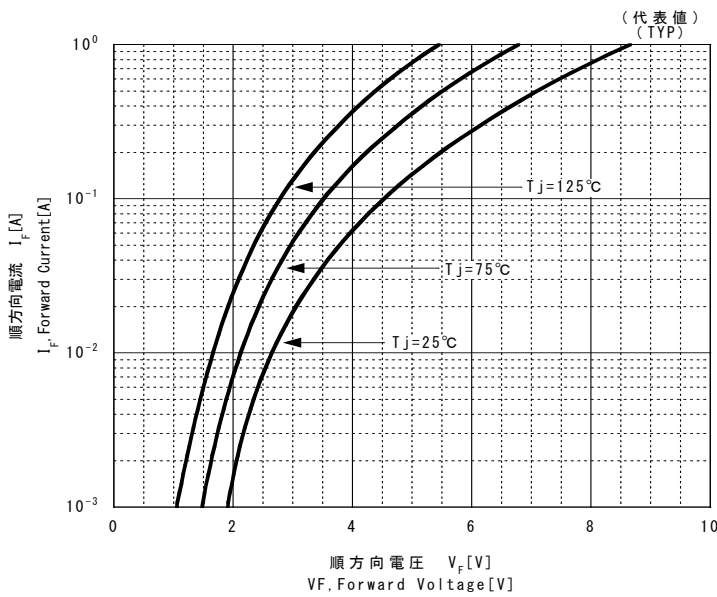
● **Electrical Characteristics ( $T_a=25^\circ\text{C}$ )**

Items	Symbol	Conditions	MAX.	Unit
Forward Voltage Drop	$V_F$	$I_F=400\text{mA}$	9	V
Reverse Leakage Current	$I_R$	$V_R=3.2\text{kV}$	10	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F=100\text{mA}$ , $I_R=200\text{mA}$ , $I_{RR}=50\text{mA}$	300	ns

● Characteristics Diagrams



AVERAGE RECTIFIED FORWARD CURRENT



FORWARD CHARACTERISTICS