

Newly-developed thin package enables producing slim-electronics products 2A/3A type Schottky Barrier Diode MA24D50/60

■ Overview

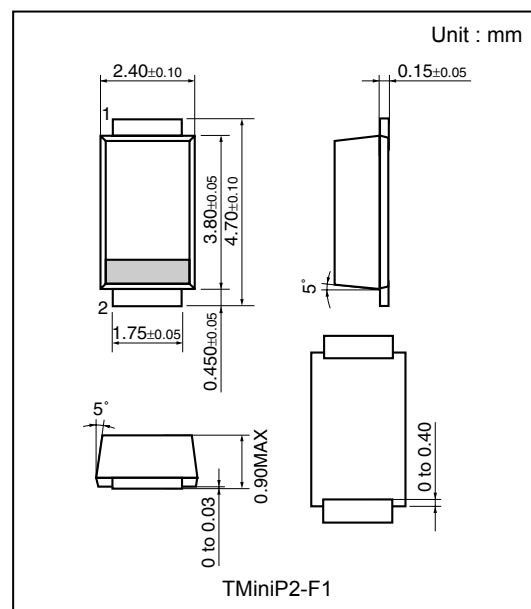
This newly developed 2A/3A type schottky barrier diode is suitable for on-board power supplies and power unit of mobile devices. As the height (h) of the package was decreased by sixty percent of the conventional NMiniP2 package, it will drastically contribute to the downsizing of the customer's set-products.

■ Feature

- With its unique wireless bonding structure, assures high surge resistance (IFSM=60A)
- Newly developed low-height package.
NMiniP2: h<2.15mm max ⇒ TMiniP2: h<0.9mm max.

■ Applications

High-frequency wave rectification of switching power supplies
Prevention of reverse current from the batteries in the mobile devices



■ Main Specifications

- Absolute Maximum Rating (Ta=25°C)

Parameter		Symbol	Rating	Unit
Reverse voltage		V _R	40	V
Peak reverse voltage		V _{RM}	40	V
Forward current (Average)	MA24D60	I _{F(AV)}	2	A
	MA24D50		3	A
Non-repetitive peak forward surge current*1		I _{FSM}	60	A
Junction temperature		T _j	150	℃
Storage temperature		T _{stg}	-40 to +150	℃

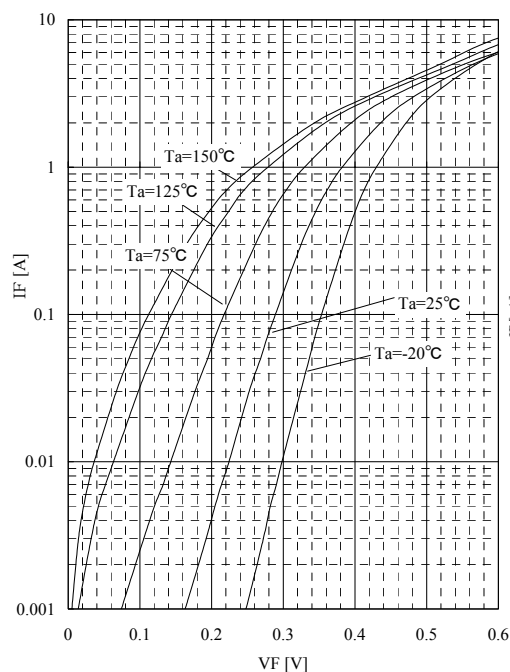
Note) *1 : The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

- Electrical Characteristics (Ta=25°C)

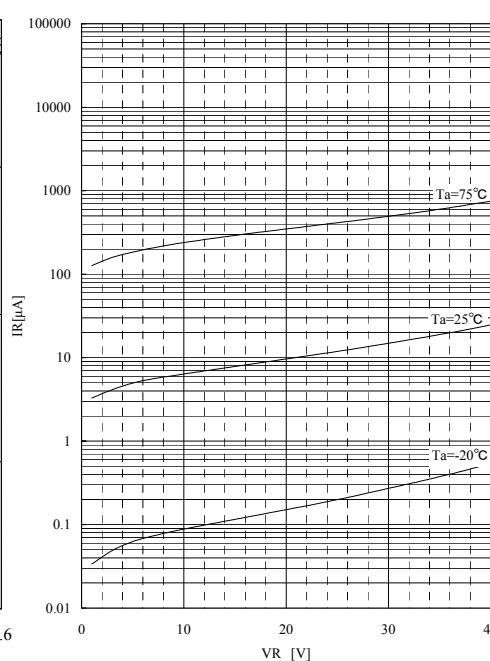
Part Number	Forward voltage V_F (max) at $I_{F(AV)}$	Reverse current I_R (max) at $V_R=40V$	Terminal capacitance C_t (typ)	Type
MA24D60	0.48 V	200 μA	90 pF	Low V_F / Low I_R
MA24D50	0.51 V	200 μA	105 pF	Low V_F / Low I_R

■ MA24D60

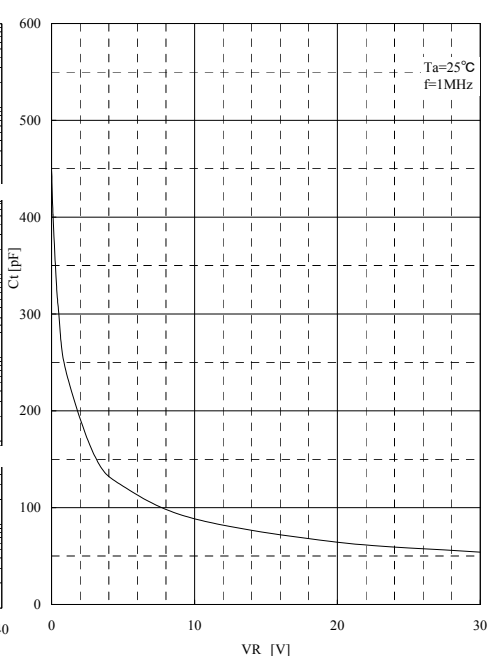
IF-VF Curve



IR-VR Curve

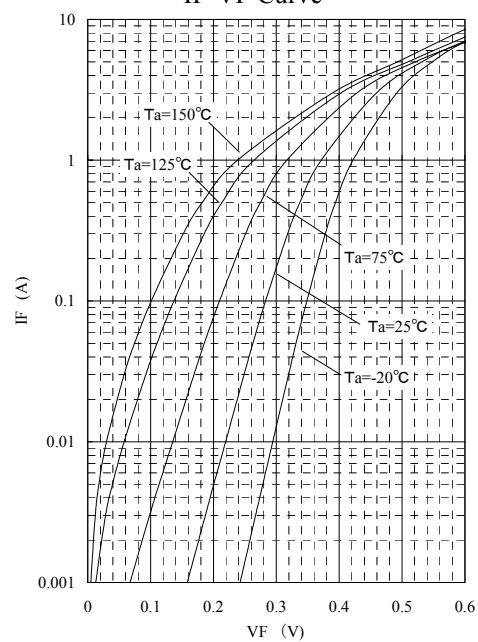


Ct-VR Curve

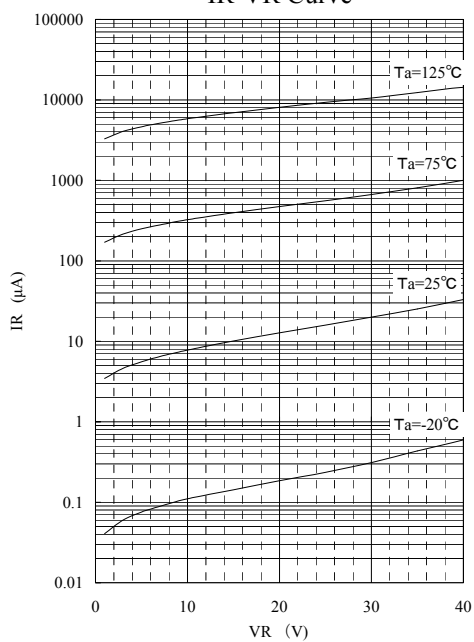


■ MA24D50

IF-VF Curve



IR-VR Curve



Ct-VR Curve

