

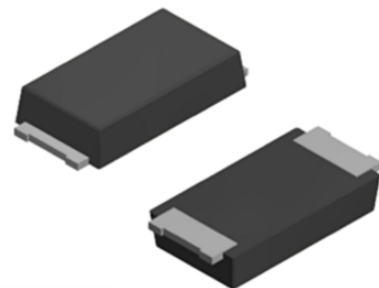
MC03HD10
Schottky Barrier Diodes
100V, 3A

Feature

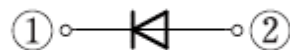
- Low I_R
- High Recovery Speed
- RoHS:Yes

OUTLINE

Package (House Name): nSMC_FL



Equivalent circuit



Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		100	V
Average forward current	I _{F(AV)}	Tl=114°C	3	A
Average forward current	I _{F(AV)}		4.71	A
Surge forward current	I _{FSM}	50Hz half sine wave, 1 cycle, Non-repetitive	60	A

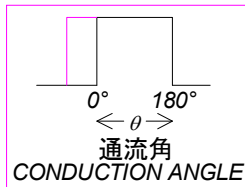
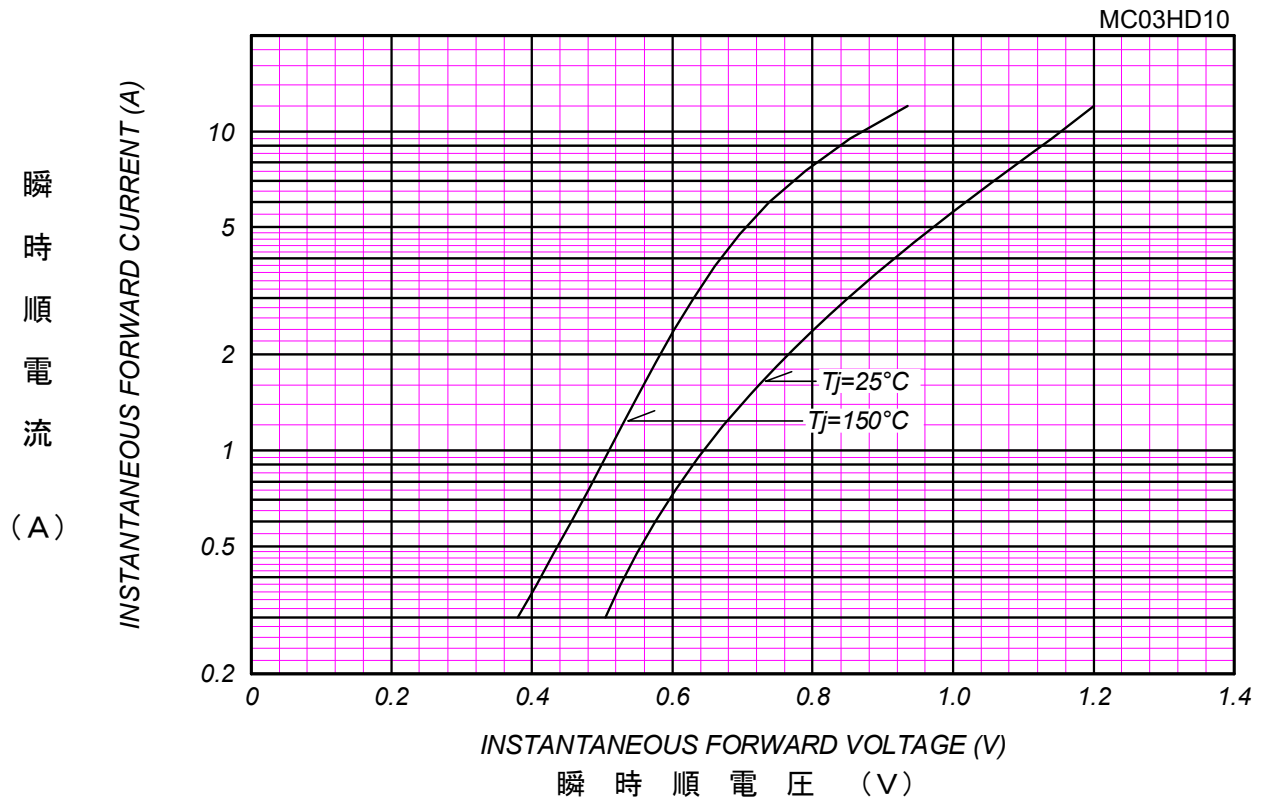
※ :See the original Specifications

Electrical Characteristics

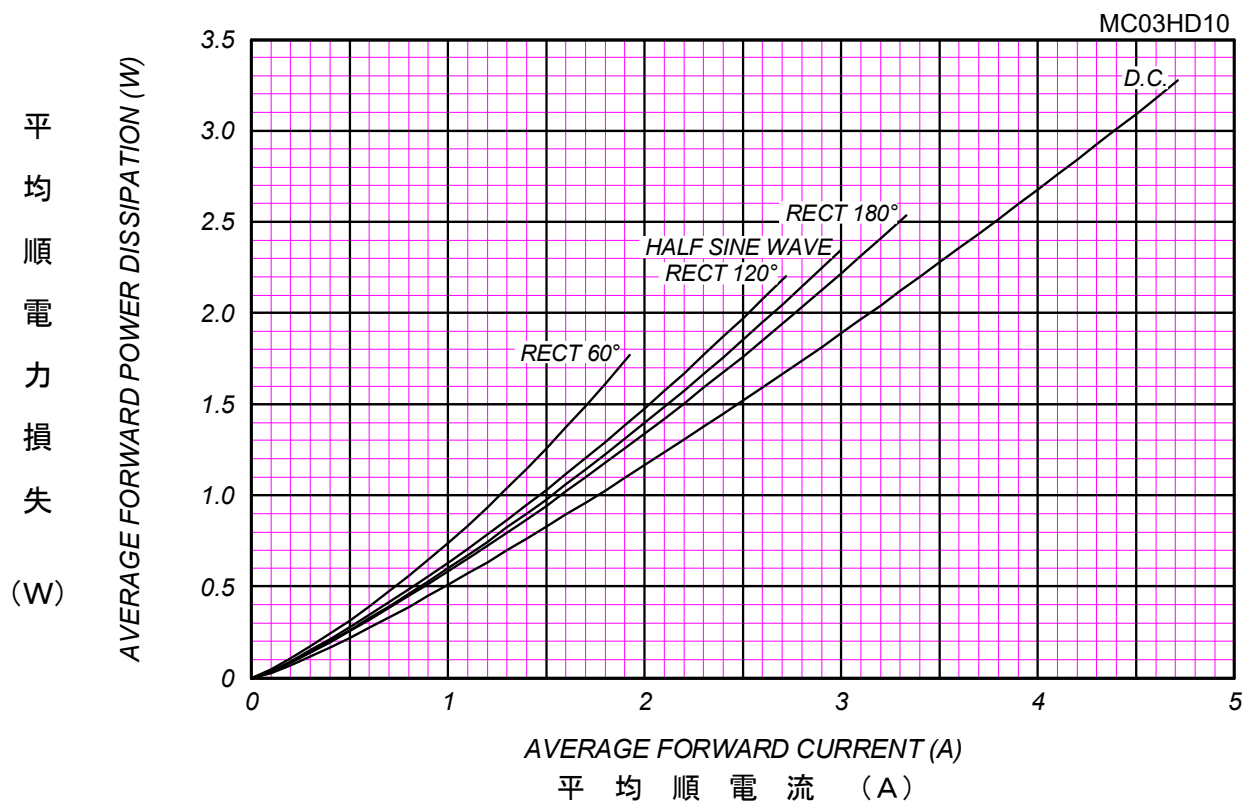
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=3A, Tj=25°C	-	-	0.85	V
Reverse current	I _R	VR=VRRM, Tj=25°C	-	-	0.1	mA
Thermal resistance	Rth(j-l)	Junction to lead	-	-	8	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient (P.C.Board mounted)	-	-	70	°C/W

※ :See the original Specifications

順電圧特性
FORWARD CURRENT VS. VOLTAGE

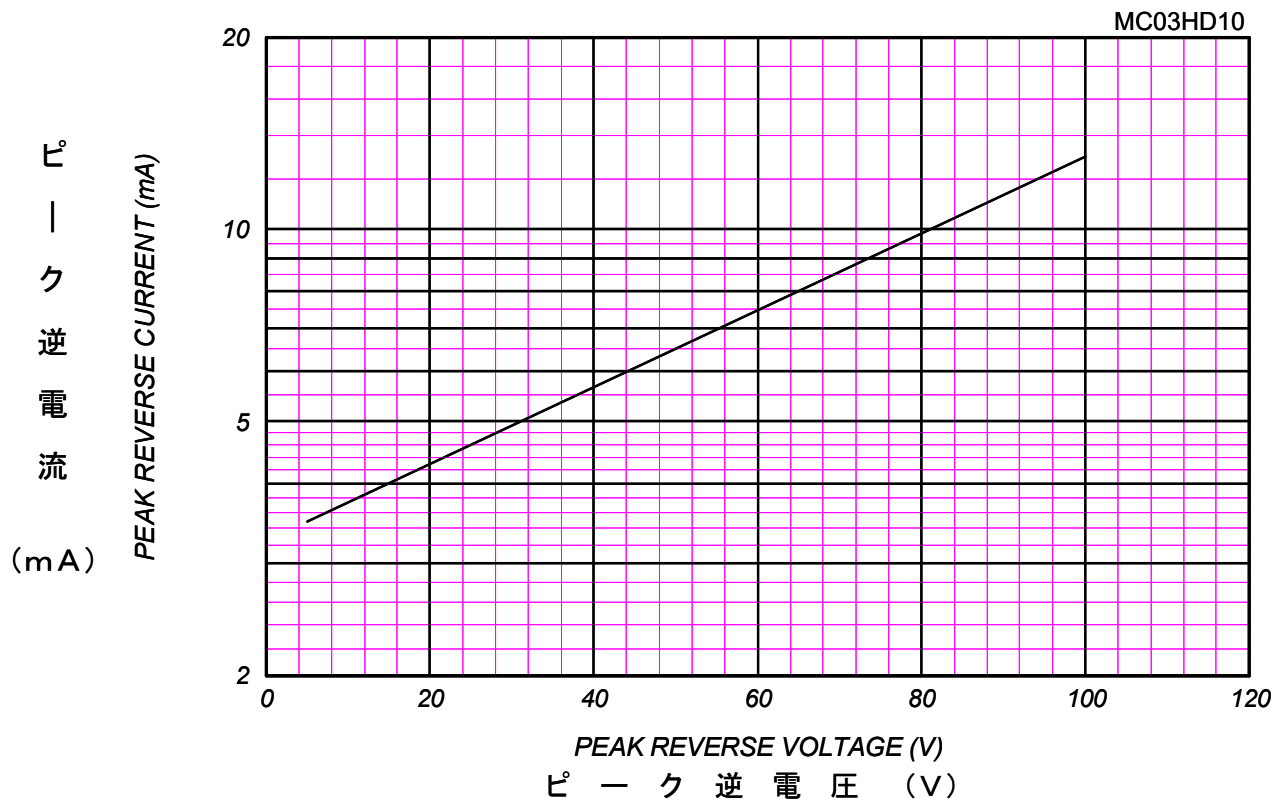


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

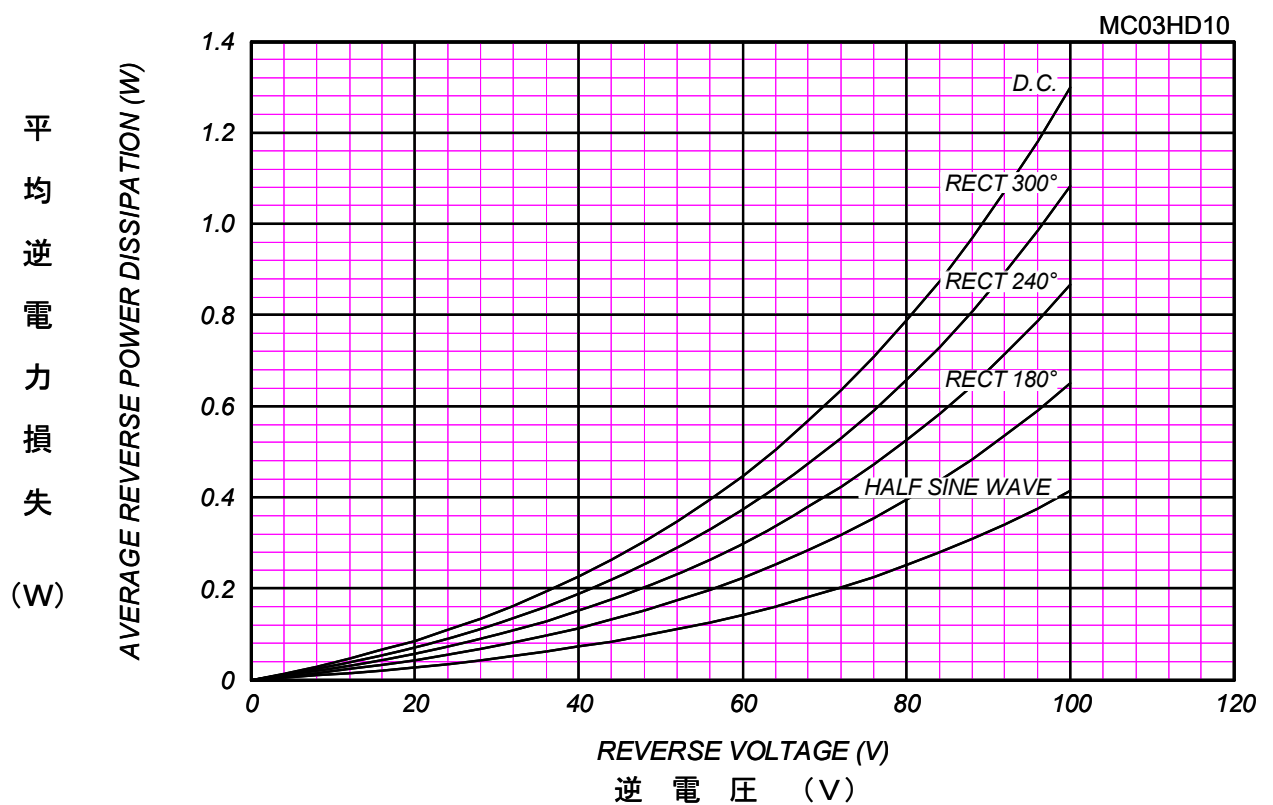


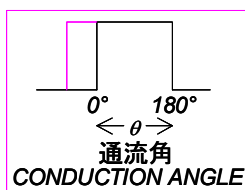
ピーク逆電流 — ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

$T_j = 150^\circ\text{C}$



平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION



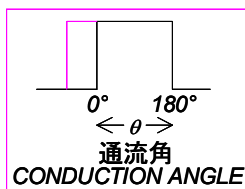
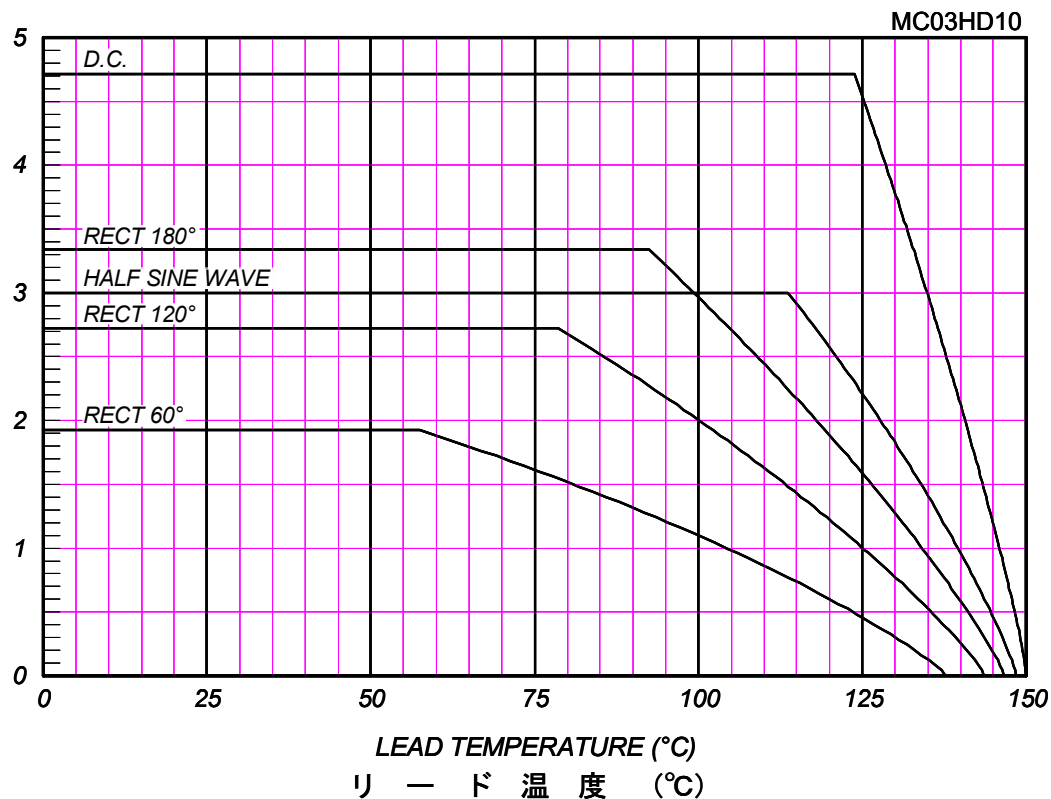


平均順電流－リード温度定格
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

$V_{RM}=50V$

平均順電流
(A)

AVERAGE FORWARD CURRENT (A)

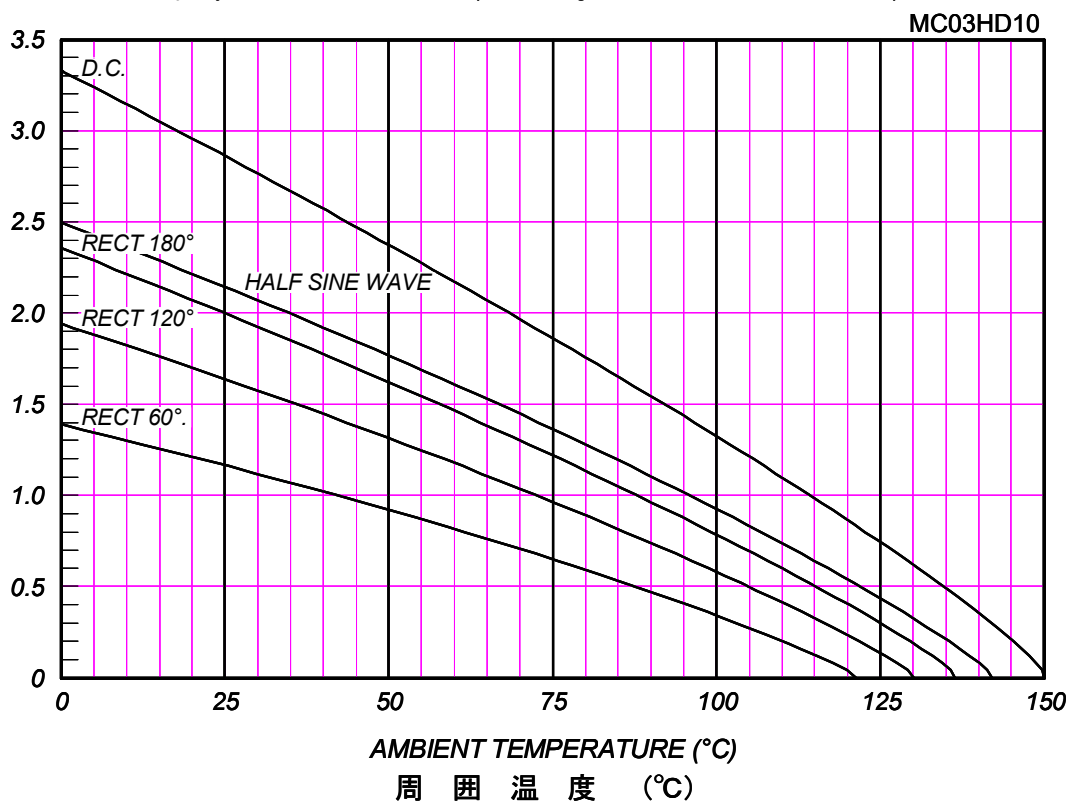


平均順電流－周囲温度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Glass-Epoxy Substrated mounted (Soldering Land 2×3.5mm, Both side), $V_{RM}=50V$

平均順電流
(A)

AVERAGE FORWARD CURRENT (A)



サージ順電流定格 SURGE CURRENT RATINGS

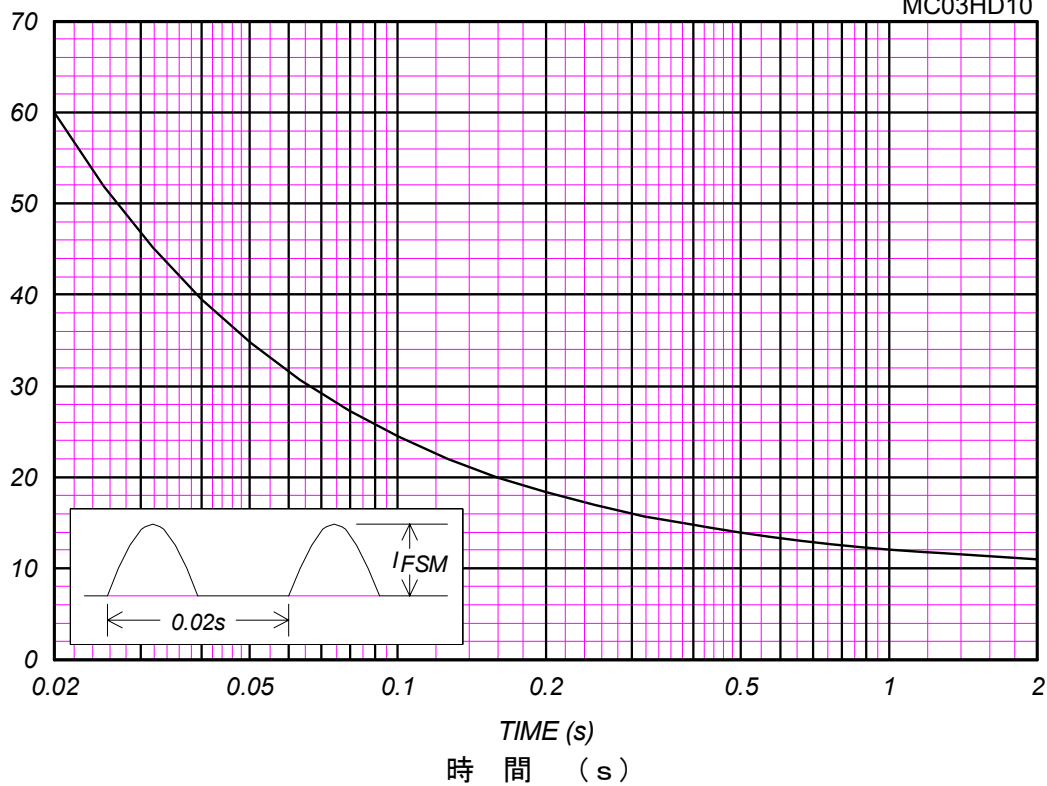
f=50Hz, Half Sine Wave, Non-Repetitive, No Load

MC03HD10

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流

(A)

SURGE FORWARD CURRENT (A)



接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

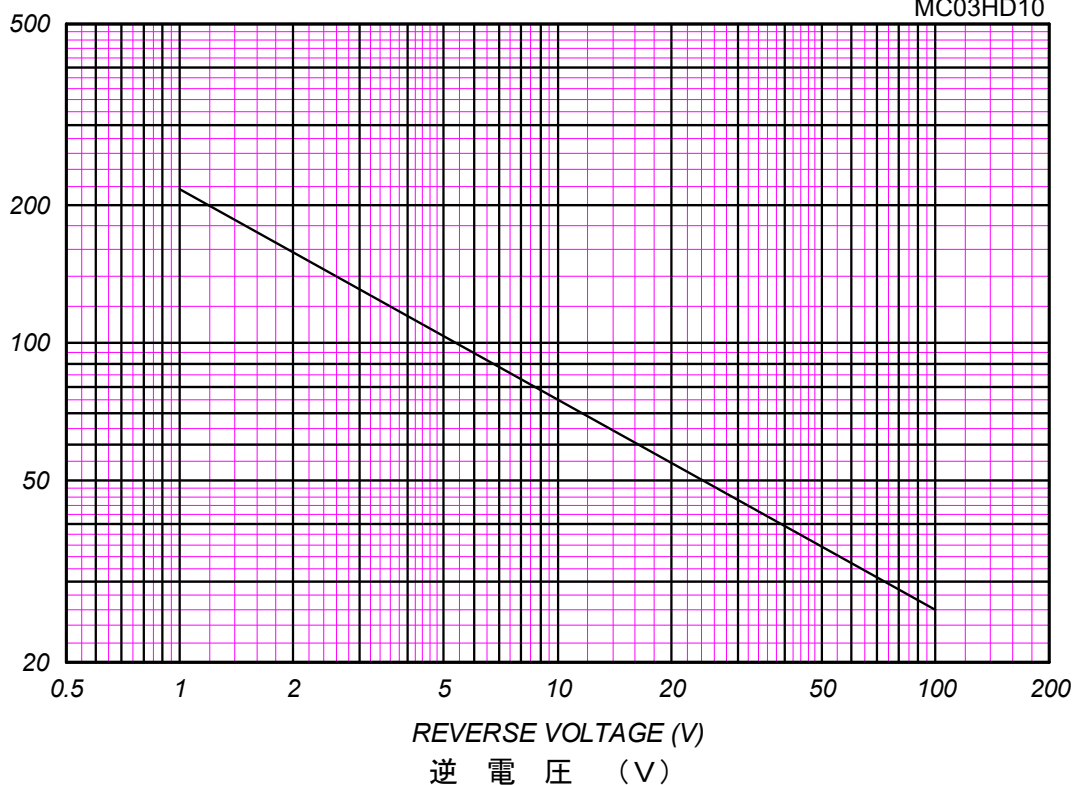
T_j=25°C, V_m=20mV_{RMS}, f=100kHz, Typical Value

MC03HD10

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量

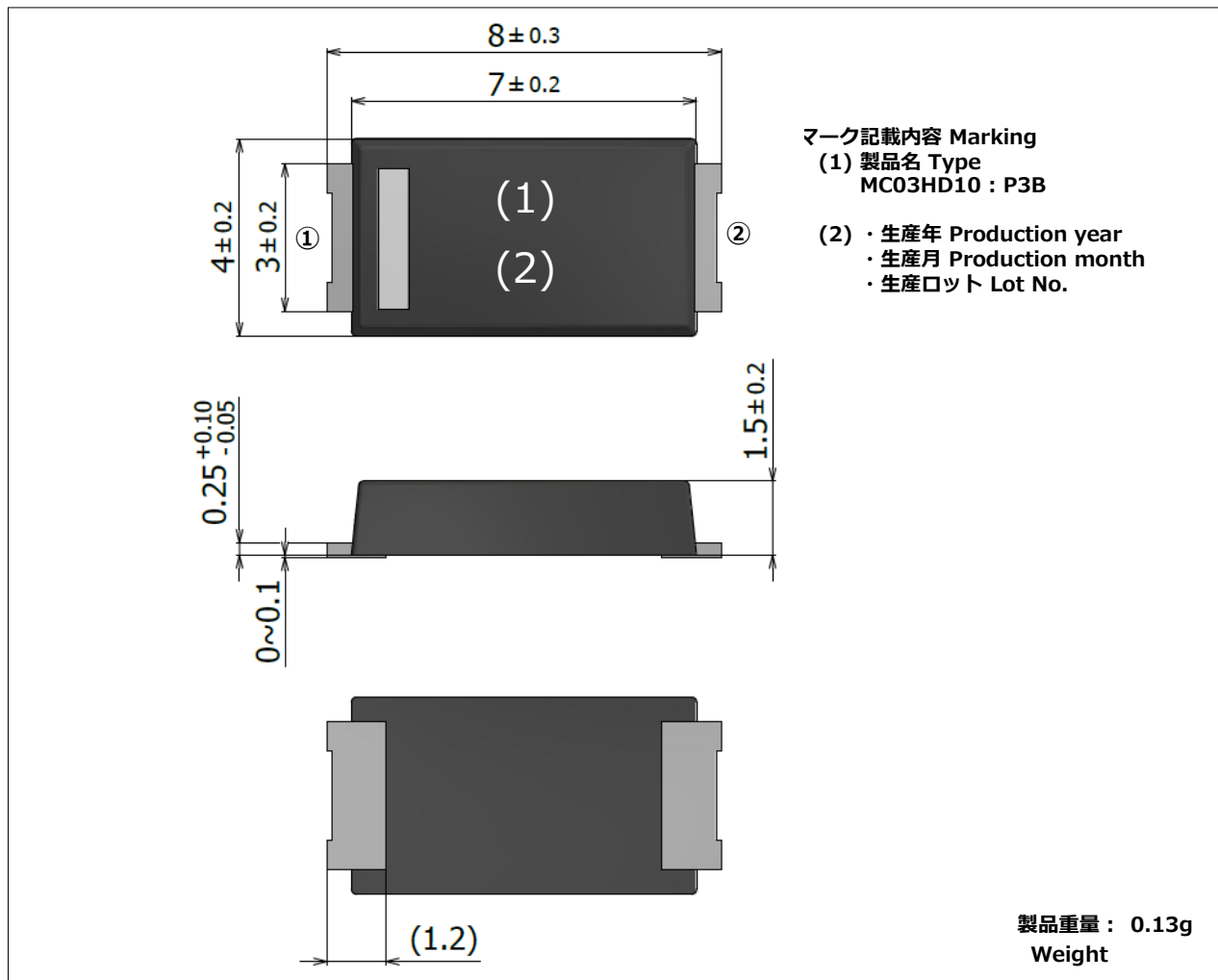
(pF)

JUNCTION CAPACITANCE (pF)

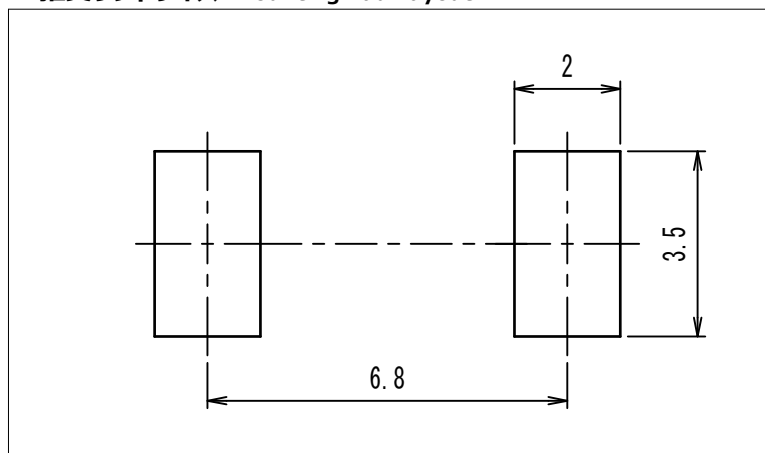


nSMC_FL

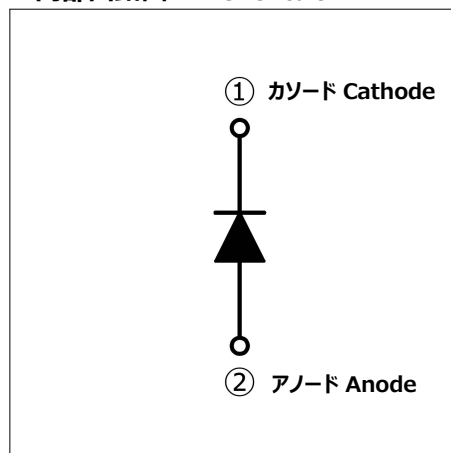
■ 外形図 Package Outline



■ 推奨ランドサイズ Mounting Pad Layout



■ 内部回路図 Inner Circuit



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