

Schottky Barrier Diode

20CQA04



DO-204AC (DO-15)



■特長 / Features

- ・ 低VF
Low forward voltage drop
- ・ 高周波動作
High frequency operation
- ・ RoHS指令対応、ハロゲンフリー
RoHS compliant, Halogen-free

■アプリケーション / Applications

- ・ 二次側整流
Secondary side rectification
- ・ DC/DCコンバータ
DC/DC converters
- ・ 逆流防止
Re-Circulating Diode
- ・ 太陽電池用バイパスダイオード
Bypass diode for Solar Cells
- ・ OR-ing diode

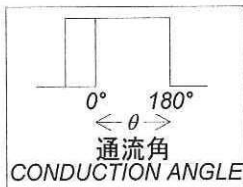
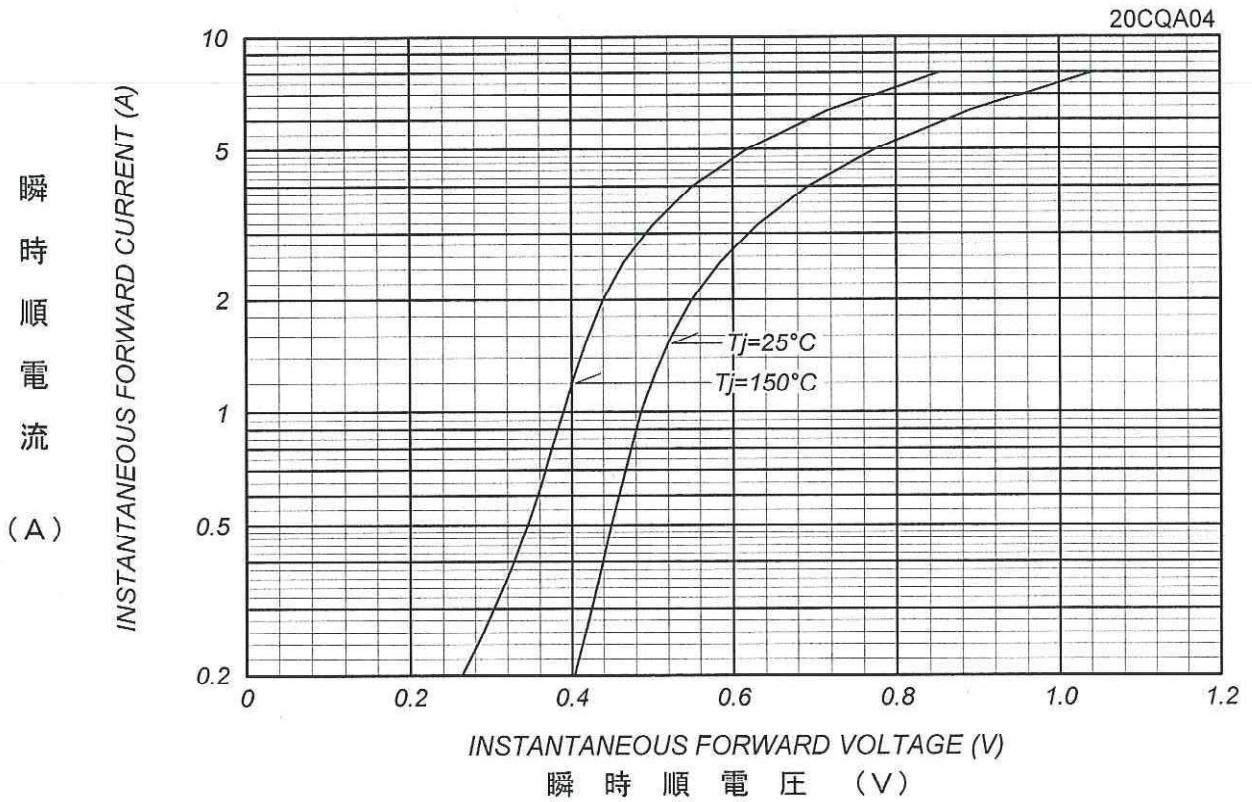
■最大定格 / Maximum ratings

Parameter	Symbol	Conditions	Limits	Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}		40	V
平均整流電流 Average Rectified Output Current	I_O	$T_I=125^{\circ}\text{C}$	2.0	A
サージ順電流 Surge Forward Current	I_{FSM}	50Hz 正弦半波、1サイクル、非くり返し Half Sine Wave, 1cycle, Non-repetitive	80	A
動作接合温度範囲 Operating Junction Temperature Range	T_{jw}		$-40 \sim +150$	$^{\circ}\text{C}$
保存温度範囲 Storage Temperature Range	T_{stg}		$-40 \sim +150$	$^{\circ}\text{C}$

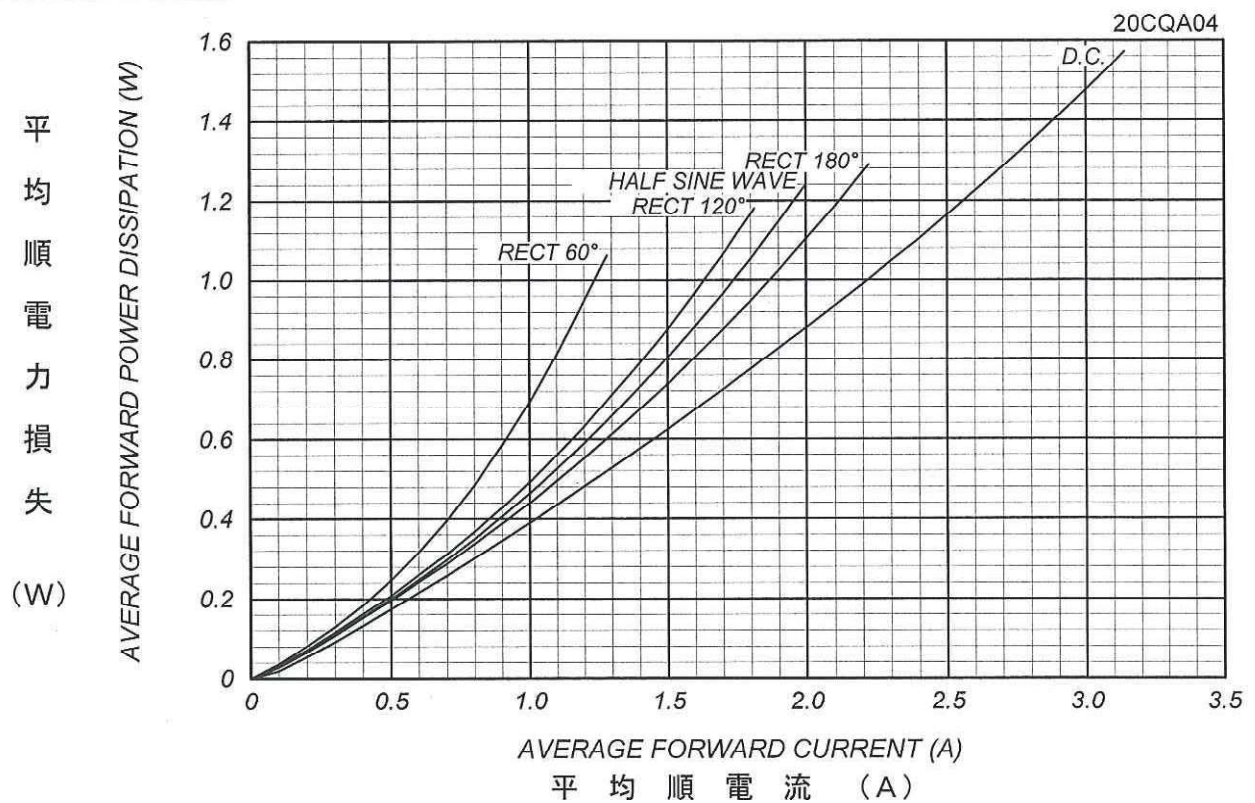
■電気的特性 / Electrical characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	$V_{RM}=V_{RRM}$ $T_j=25^{\circ}\text{C}$	-	-	0.30	mA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$I_{FM}=2\text{A}$ $T_j=25^{\circ}\text{C}$	-	-	0.55	V
熱抵抗 Thermal Resistance	R_{th}	接合部ーリード間 Junction to Lead	-	-	17.0	$^{\circ}\text{C}/\text{W}$

順電壓特性
FORWARD CURRENT VS. VOLTAGE

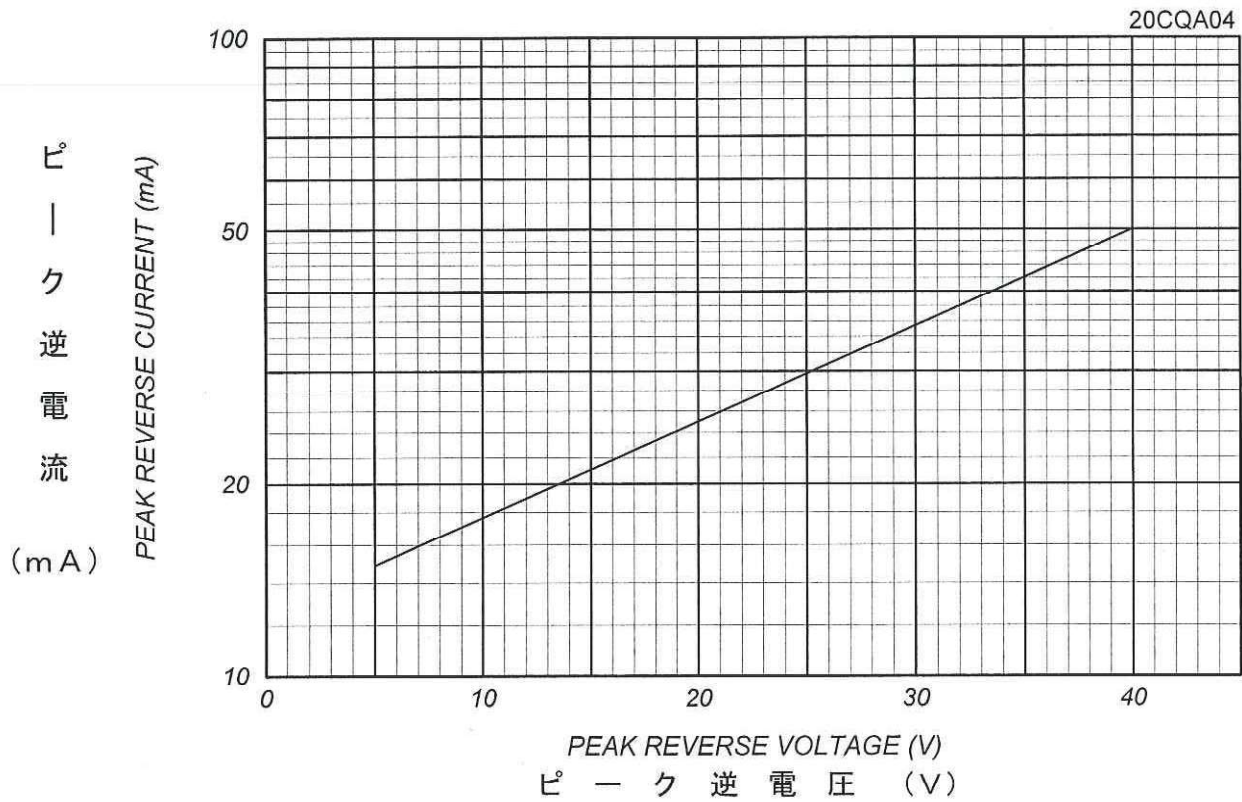


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

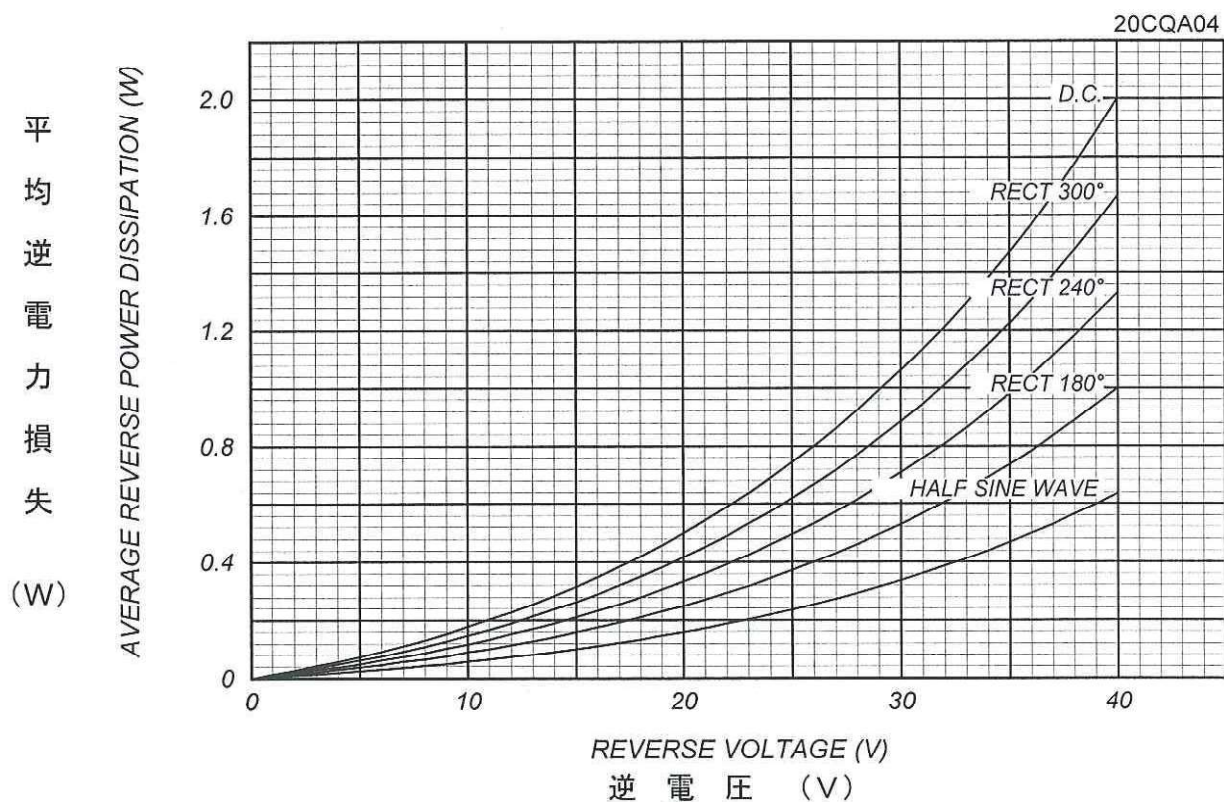


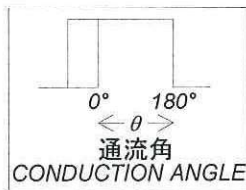
ピーク逆電流 — ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

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



平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION

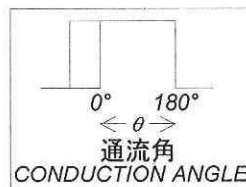
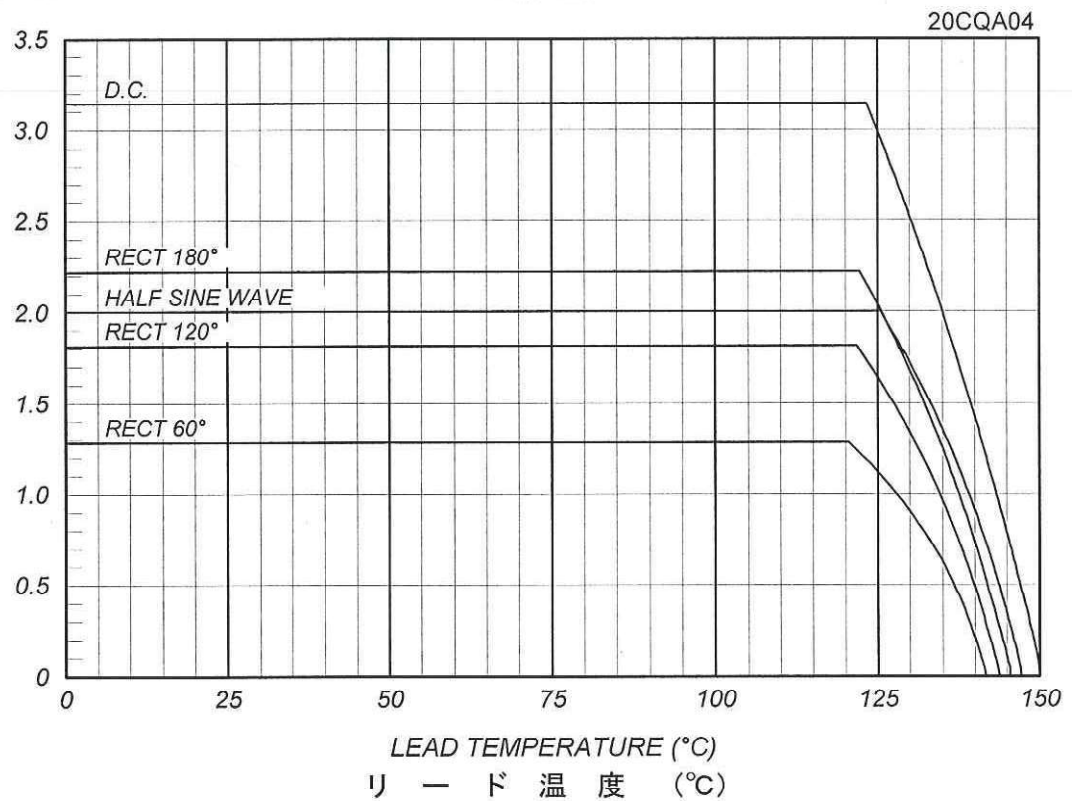




平均順電流－リード温度定格
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

$V_{RM}=20V$

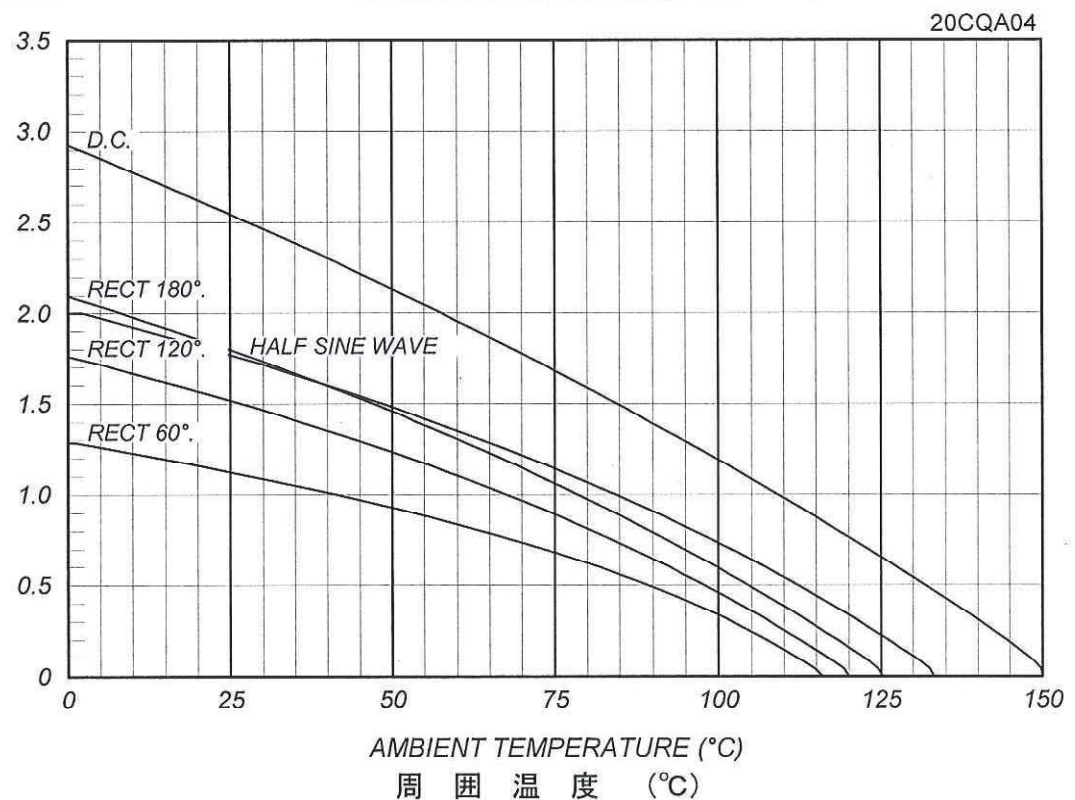
平均順電流
(A)
AVERAGE FORWARD CURRENT (A)



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

Without Fin or P.C. Board, $V_{RM}=20V$

平均順電流
(A)
AVERAGE FORWARD CURRENT (A)



サージ順電流定格 SURGE CURRENT RATINGS

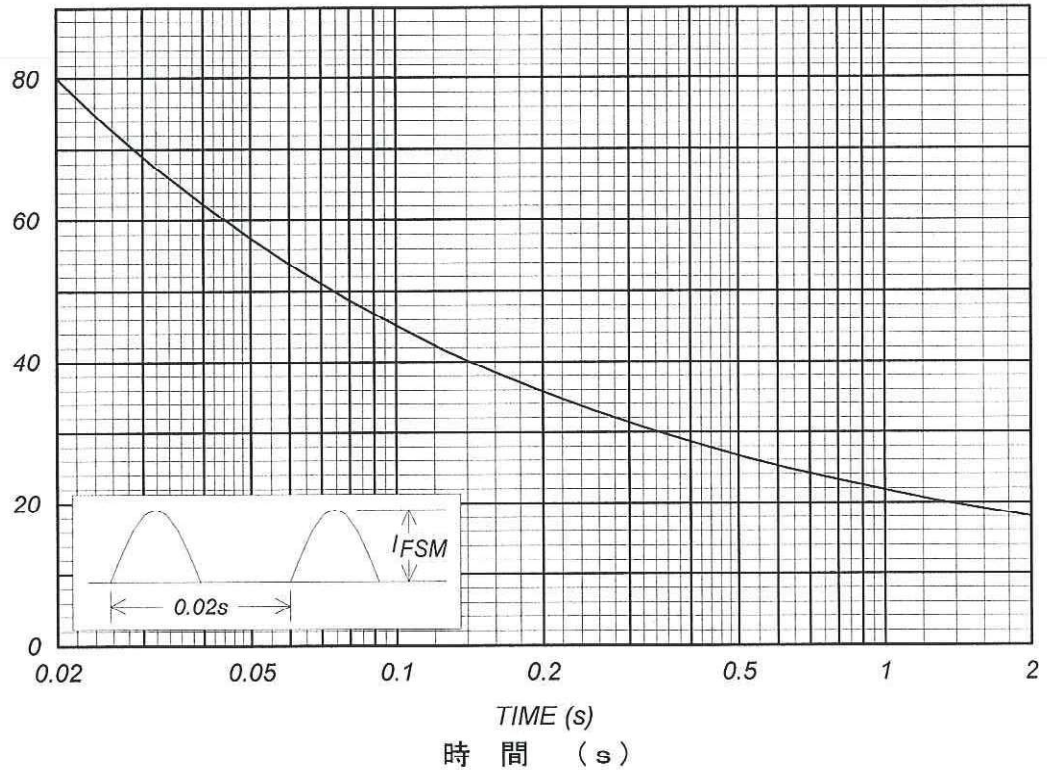
f=50Hz, Half Sine Wave, Non-Repetitive, No Load

20CQA04

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(A)

SURGE FORWARD CURRENT (A)



接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

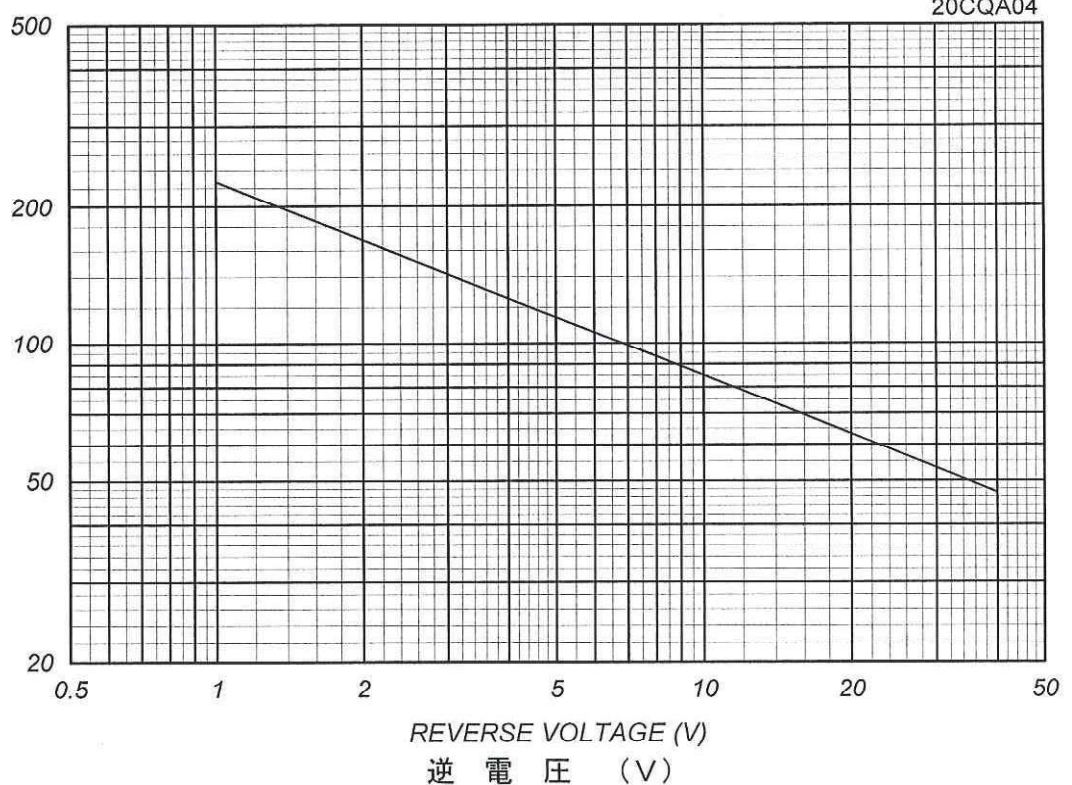
T_j=25°C, V_m=20mV_{RMS}, f=100kHz, Typical Value

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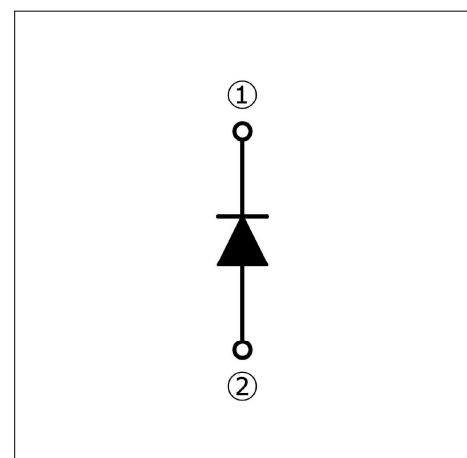
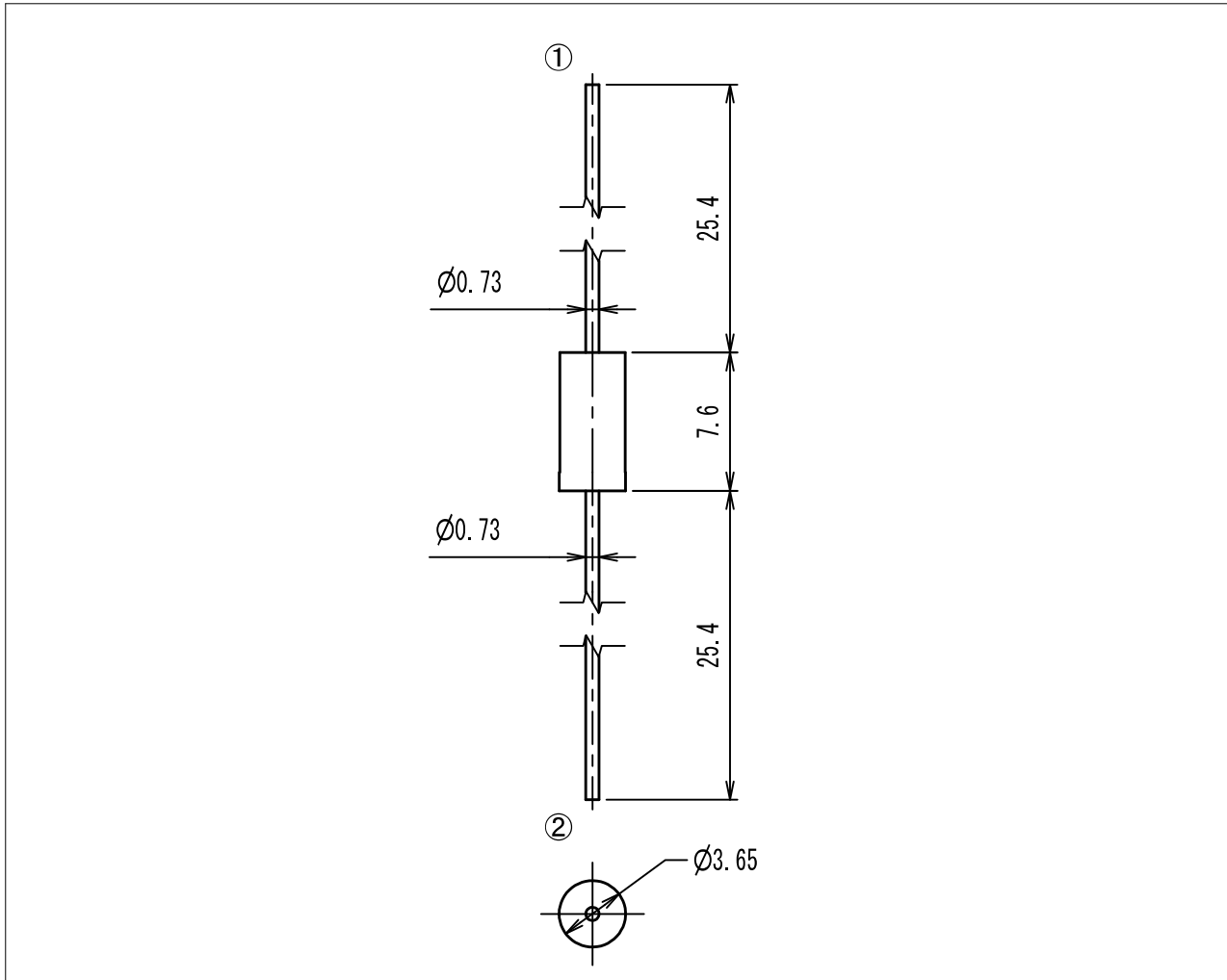
接
合
容
量

(pF)

JUNCTION CAPACITANCE (pF)



DO-204AC (DO-15)



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