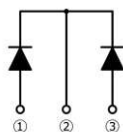


Schottky Barrier Diode

FCQS10A065



TO-220FullMold



■ 特長 / Features

- ・ 低VF
Low forward voltage drop
- ・ 高周波動作
High frequency operation
- ・ RoHS指令対応
RoHS compliant

■ 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

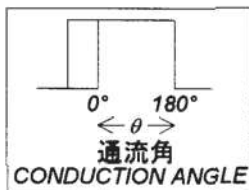
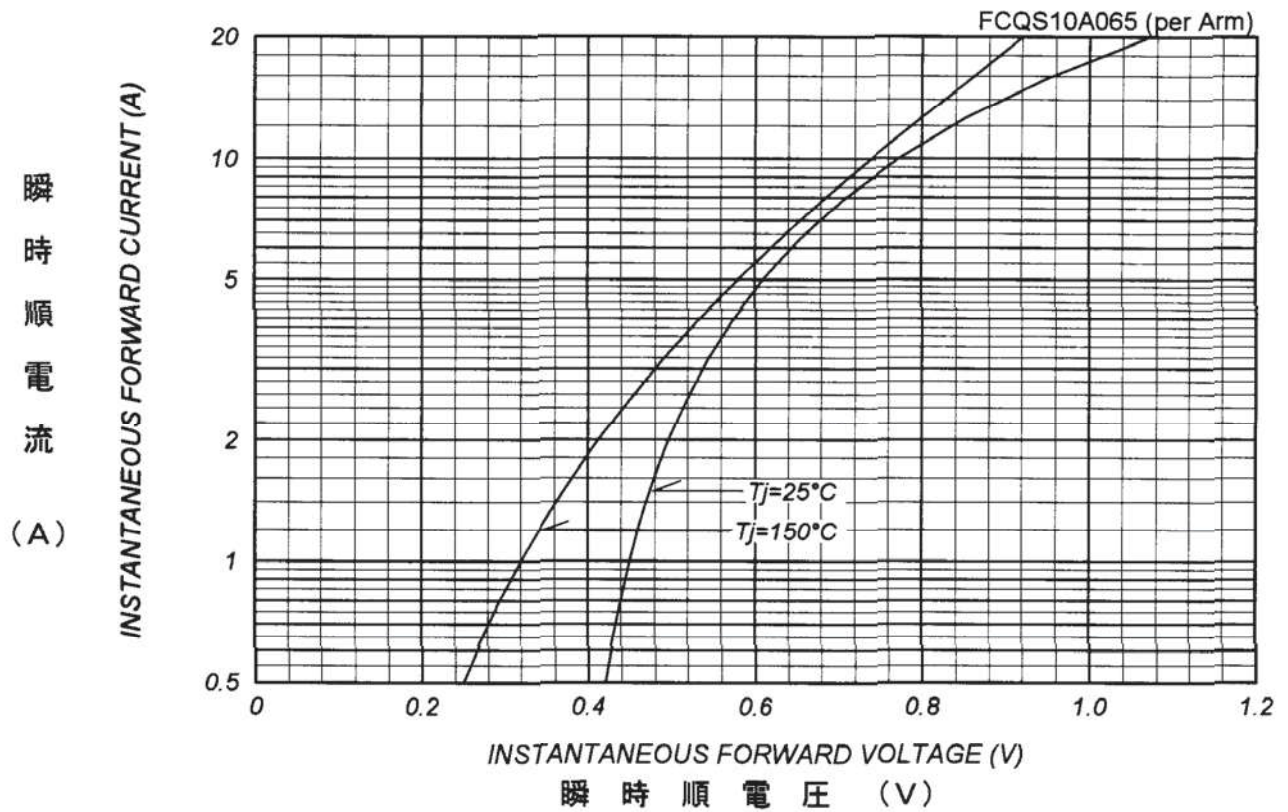
■ 最大定格 / Maximum ratings

Parameter	Symbol	Conditions	Limits	Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}		65	V
平均整流電流 Average Rectified Output Current	I_O	$T_c=124^{\circ}\text{C}$	10.0	A
サージ順電流 Surge Forward Current	I_{FSM}	50Hz 正弦全波、1サイクル、非くり返し Full Sine Wave, 1cycle, Non-repetitive	120	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}		$-40 \sim +150$	$^{\circ}\text{C}$

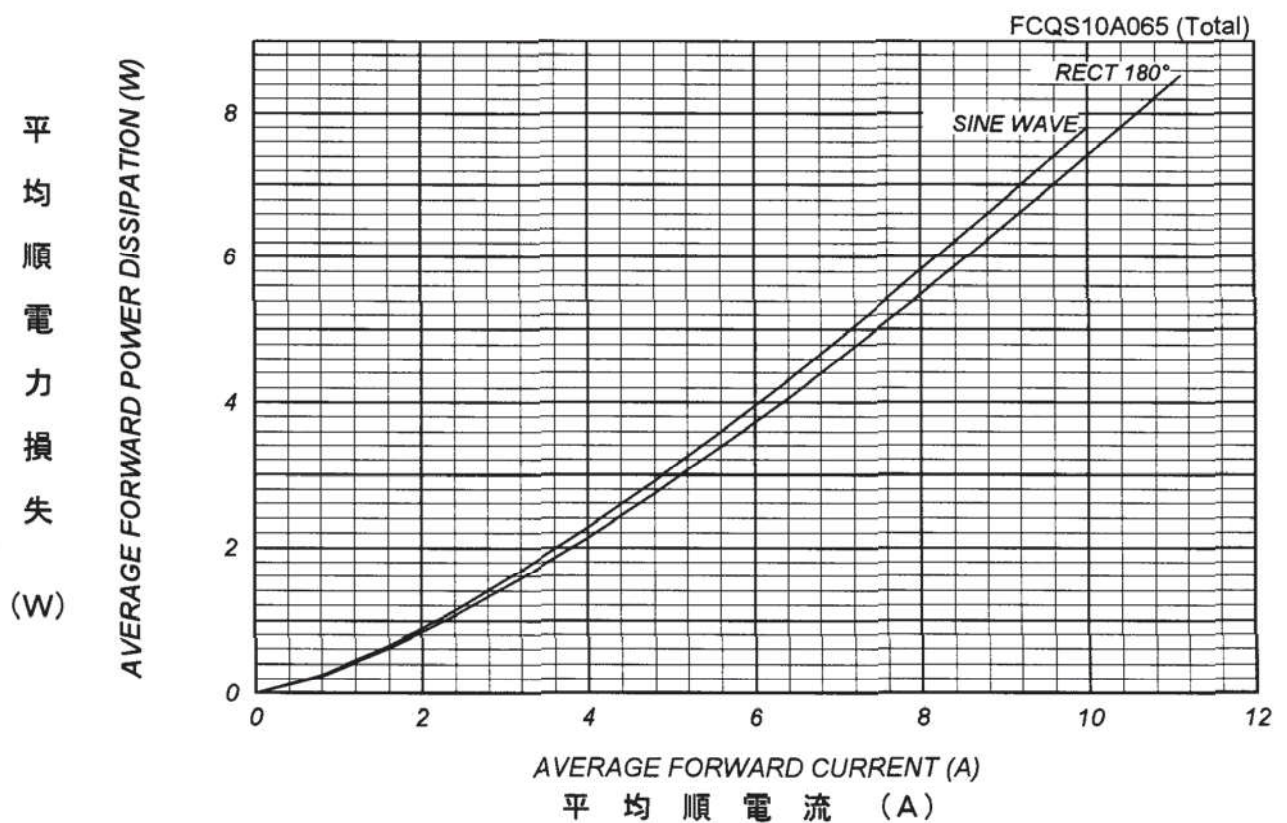
■ 電気的特性 / Electrical characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	$V_{RM}=V_{RRM}$ $T_j=25^{\circ}\text{C}$ per diode	-	-	0.40	mA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$I_{FM}=5\text{A}$ $T_j=25^{\circ}\text{C}$ per diode	-	-	0.61	V
熱抵抗 Thermal Resistance	R_{th}	接合部-ケース間 Junction to Case	-	-	3.0	$^{\circ}\text{C}/\text{W}$

順電圧特性
FORWARD CURRENT VS. VOLTAGE

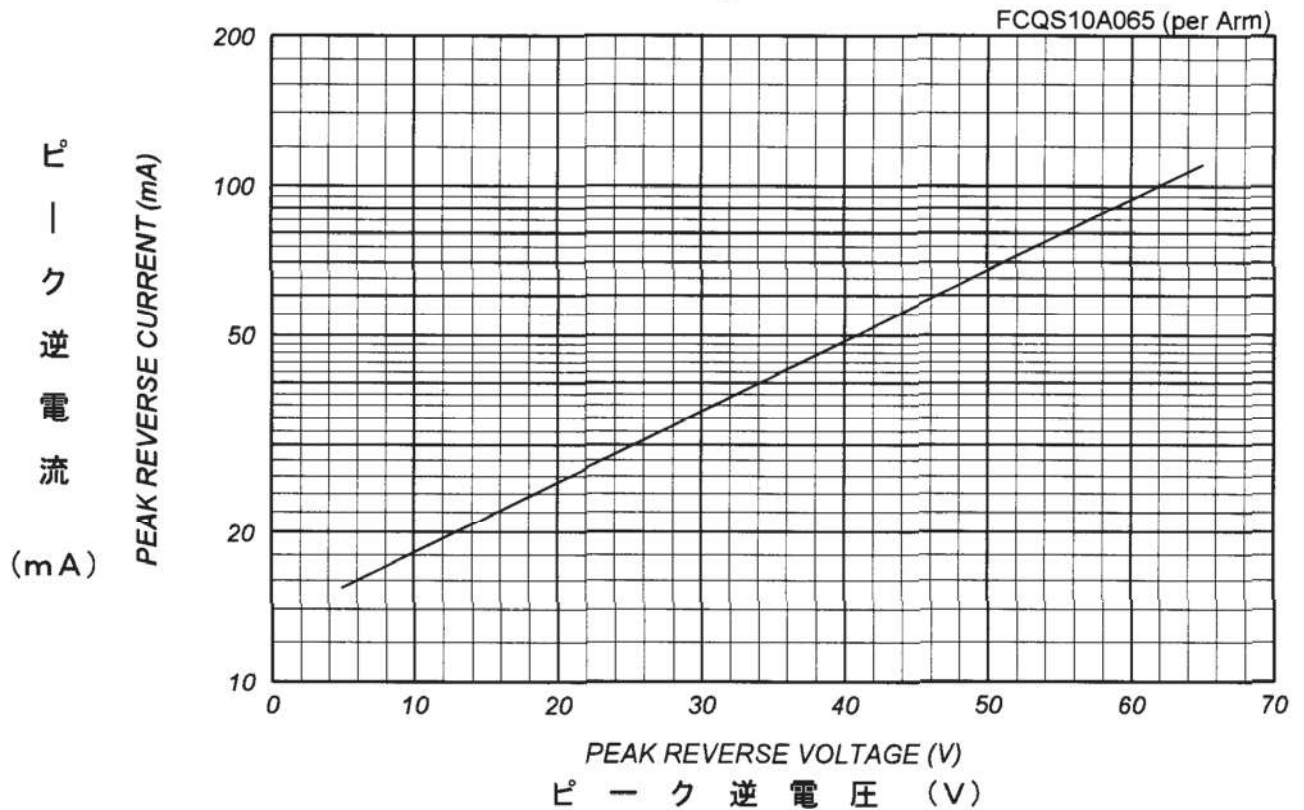


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

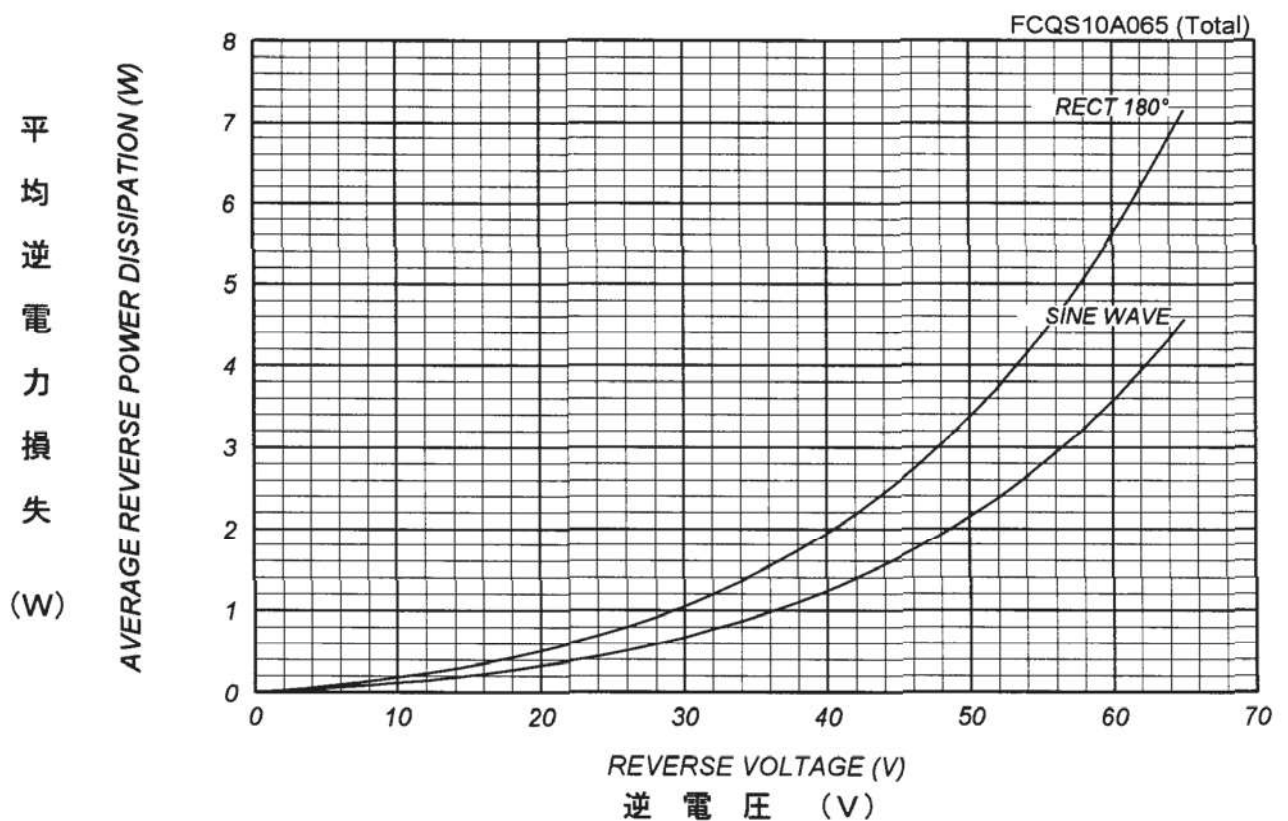


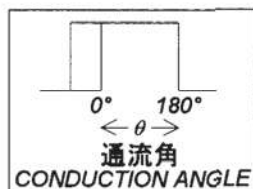
ピーク逆電流 — ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

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



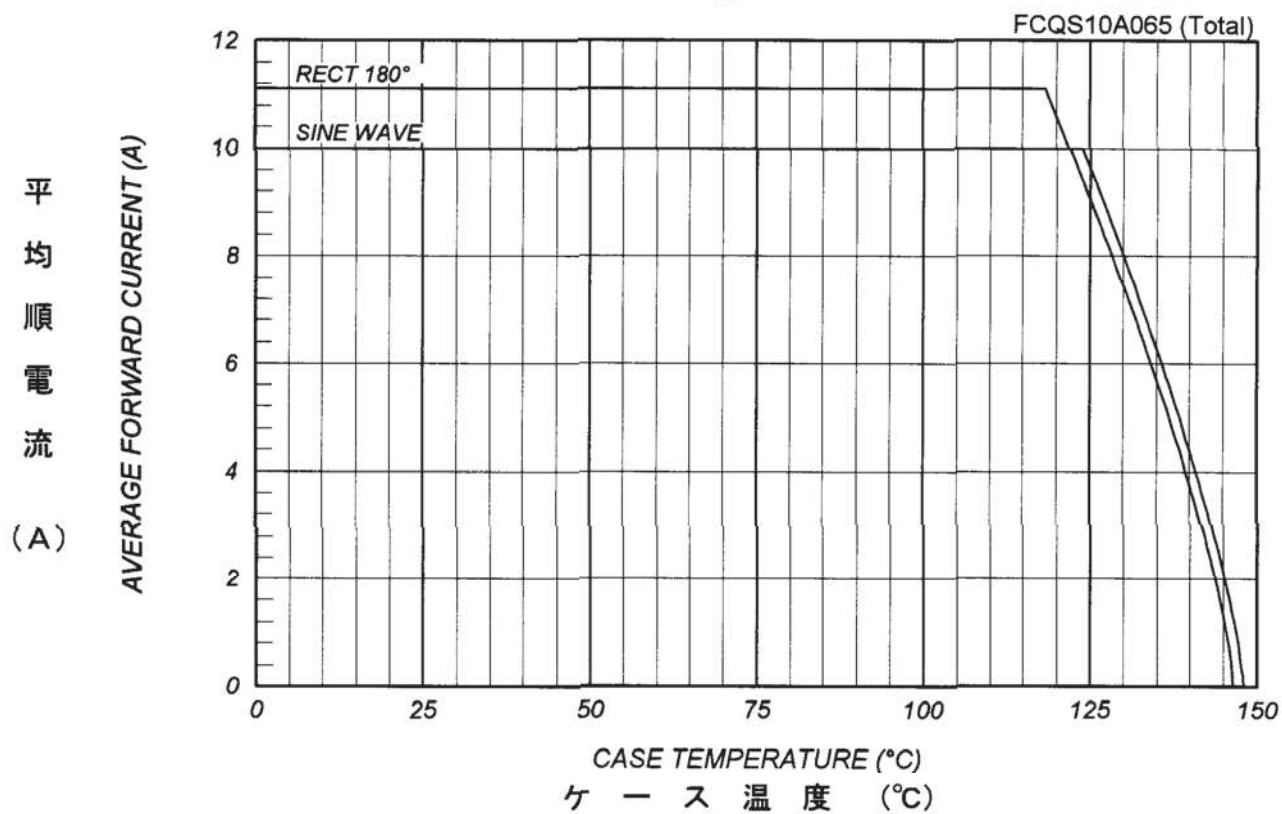
平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION





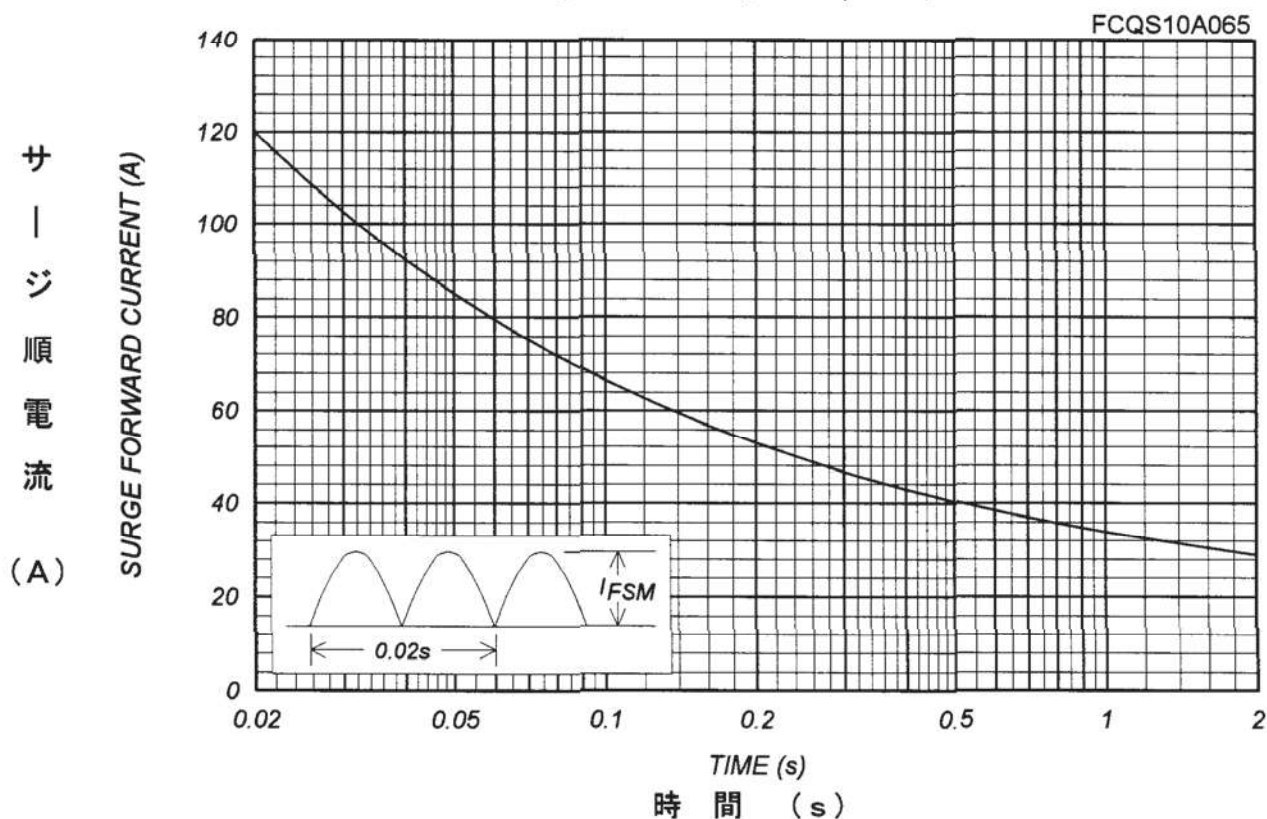
平均順電流－ケース温度定格 AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=30V$



サージ順電流定格 SURGE CURRENT RATINGS

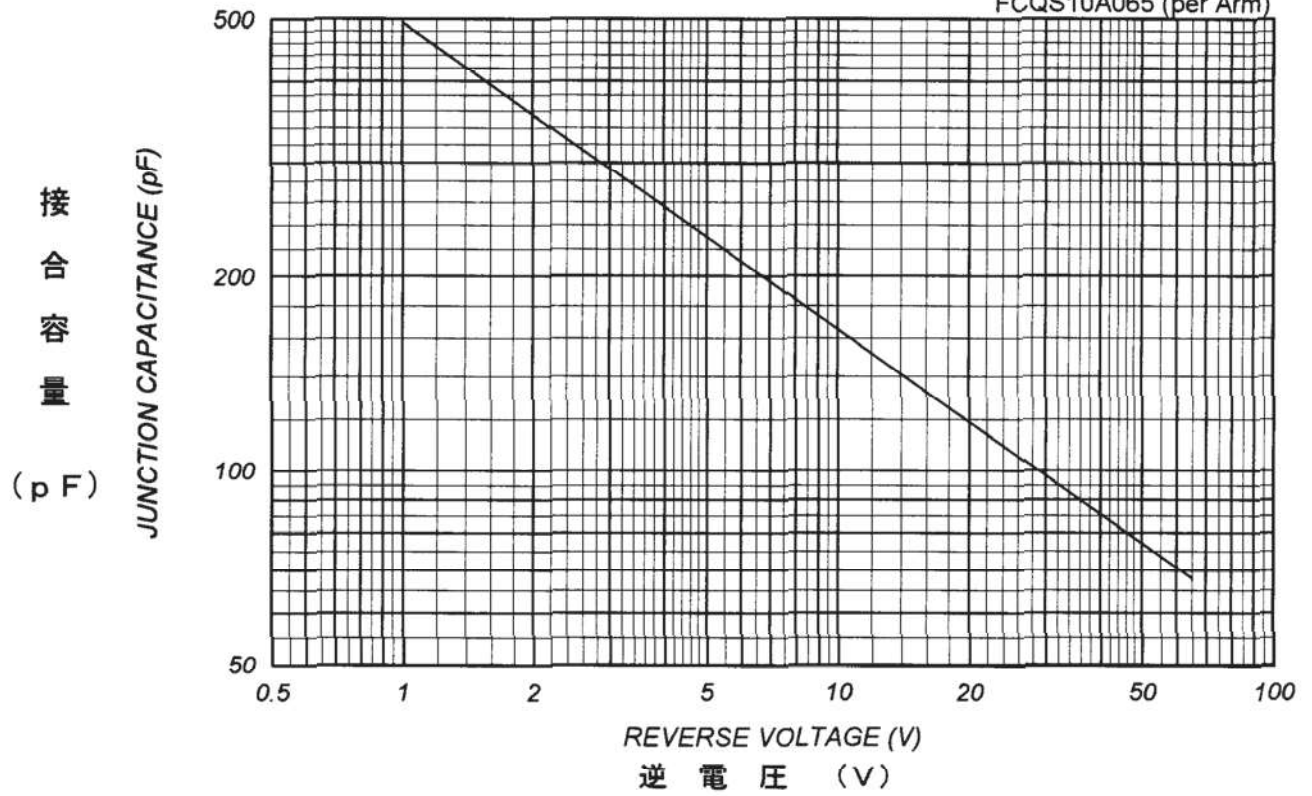
f=50Hz, Half Sine Wave, Non-Repetitive, No Load



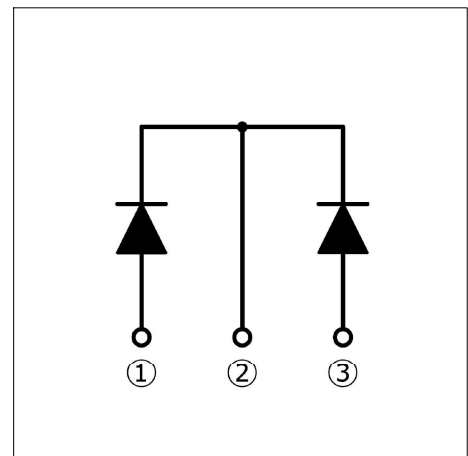
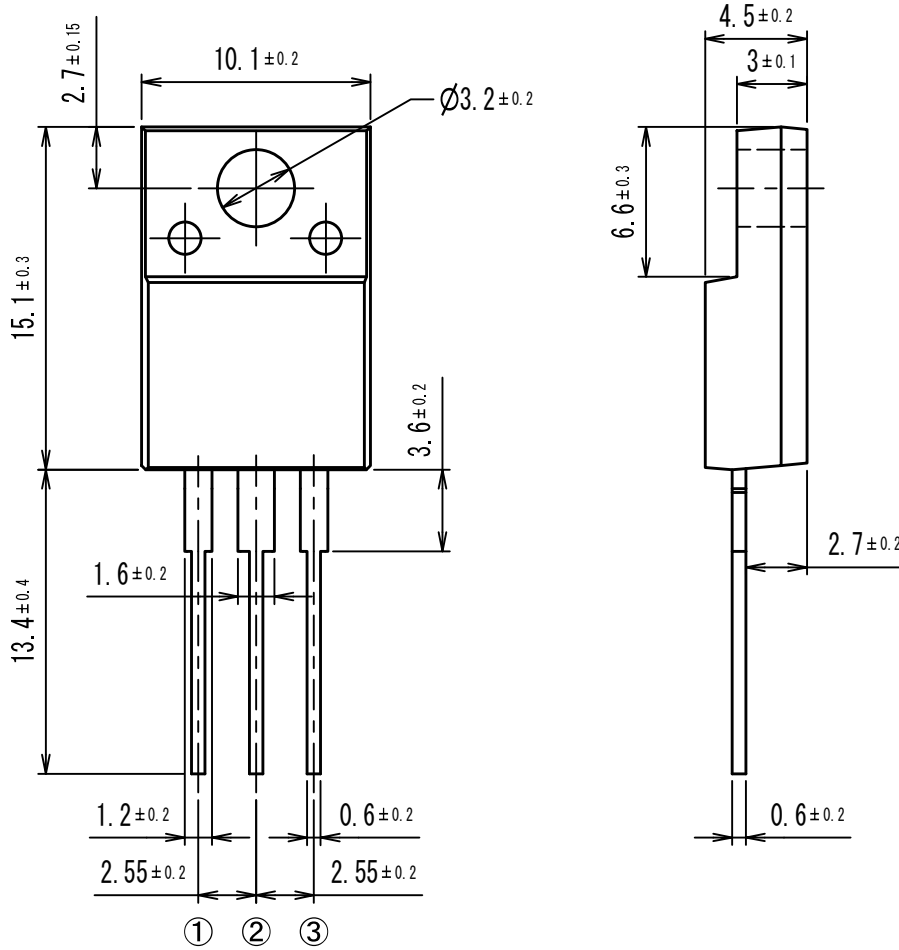
接 合 容 量 特 性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

$T_j=25^{\circ}\text{C}$, $V_m=20\text{mV}_{\text{RMS}}$, $f=100\text{kHz}$, Typical Value

FCQS10A065 (per Arm)



TO-220FullMold



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【Standard applications】
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【Special applications】
Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.
【特定用途】
原子力制御システム、航空機器、航空宇宙機器、海中継機器、生命維持のための装置、システム等
【Specific applications】
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