

Schottky Barrier Diode

11EQS04



3Maxxφ2.7 (DO-41S)

■ 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
- ・ 太陽電池用バイパスダイオード
Bypass diode for Solar Cells
- ・ OR-ing diode

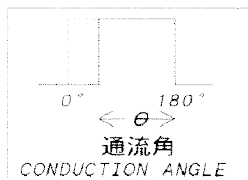
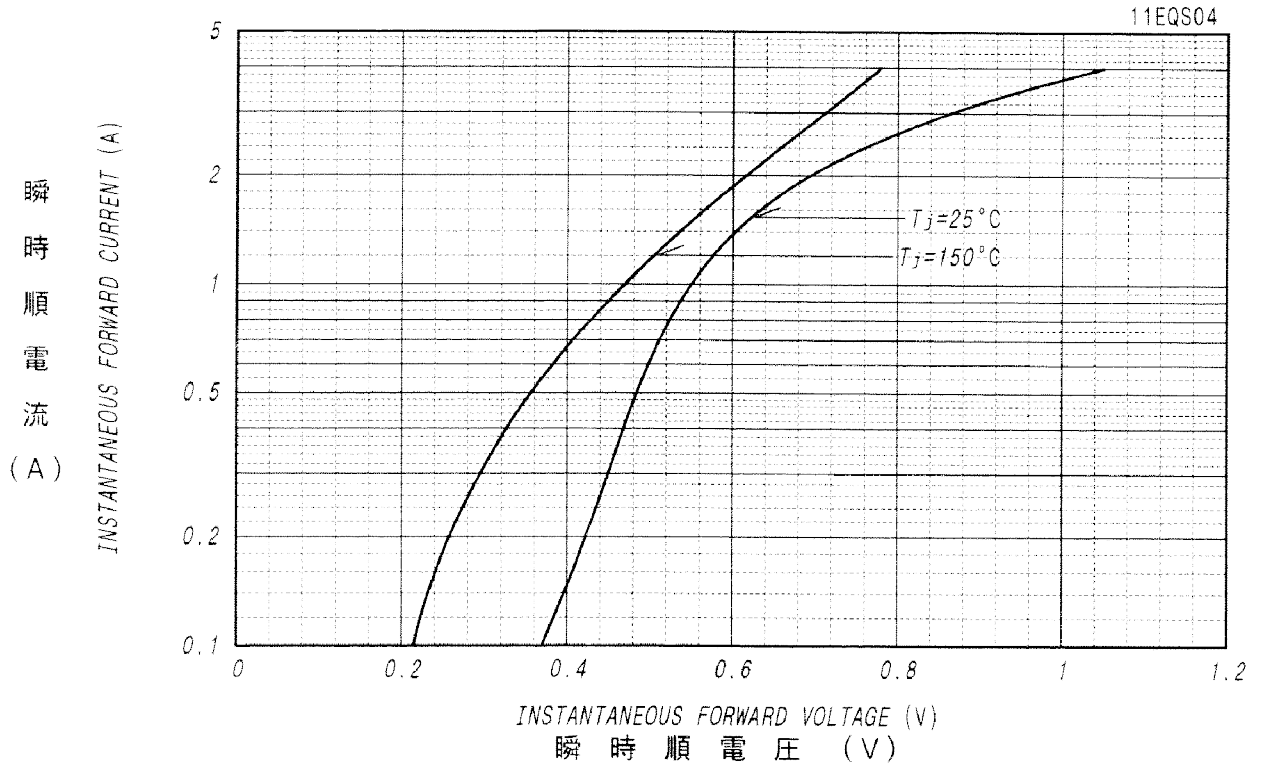
■ 最大定格 / Maximum ratings

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	Ta=48℃ プリント基板実装 P.C.Board mounted	1.0	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	40	A
動作接合温度範囲 Operating Junction Temperature Range	T_{jw}		-40 ~ +150	℃
保存温度範囲 Storage Temperature Range	T_{stg}		-40 ~ +150	℃

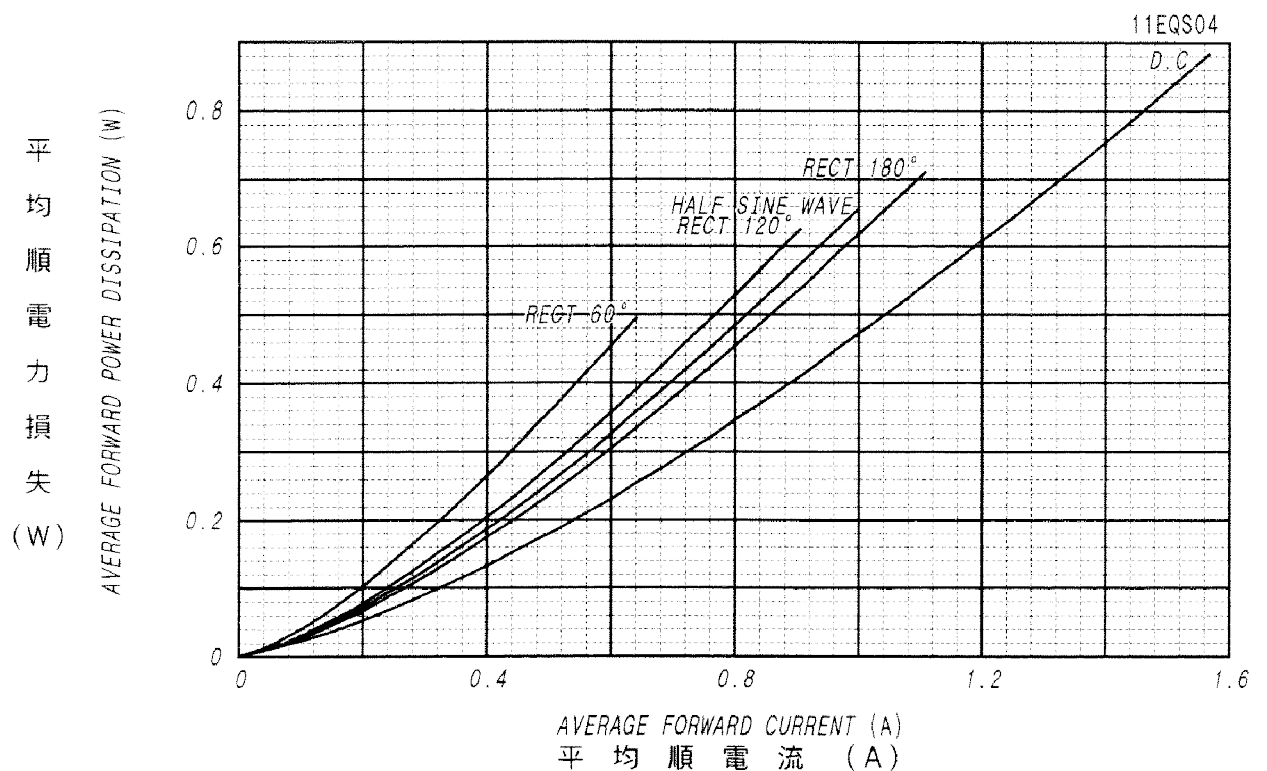
■ 電気的特性 / Electrical characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	$V_{RM}=V_{RRM}$ $T_j=25^{\circ}\text{C}$	-	-	1.00	mA
ピーク順電圧 Peak Forward Voltage	V_{FM}	$I_{FM}=1\text{A}$ $T_j=25^{\circ}\text{C}$	-	-	0.55	V
熱抵抗 Thermal Resistance	R_{th}	接合部ー周囲間 (プリント基板実装) Junction to Ambient(P.C.Board mounted)	-	-	110	℃/W

順電壓特性
FORWARD CURRENT VS. VOLTAGE

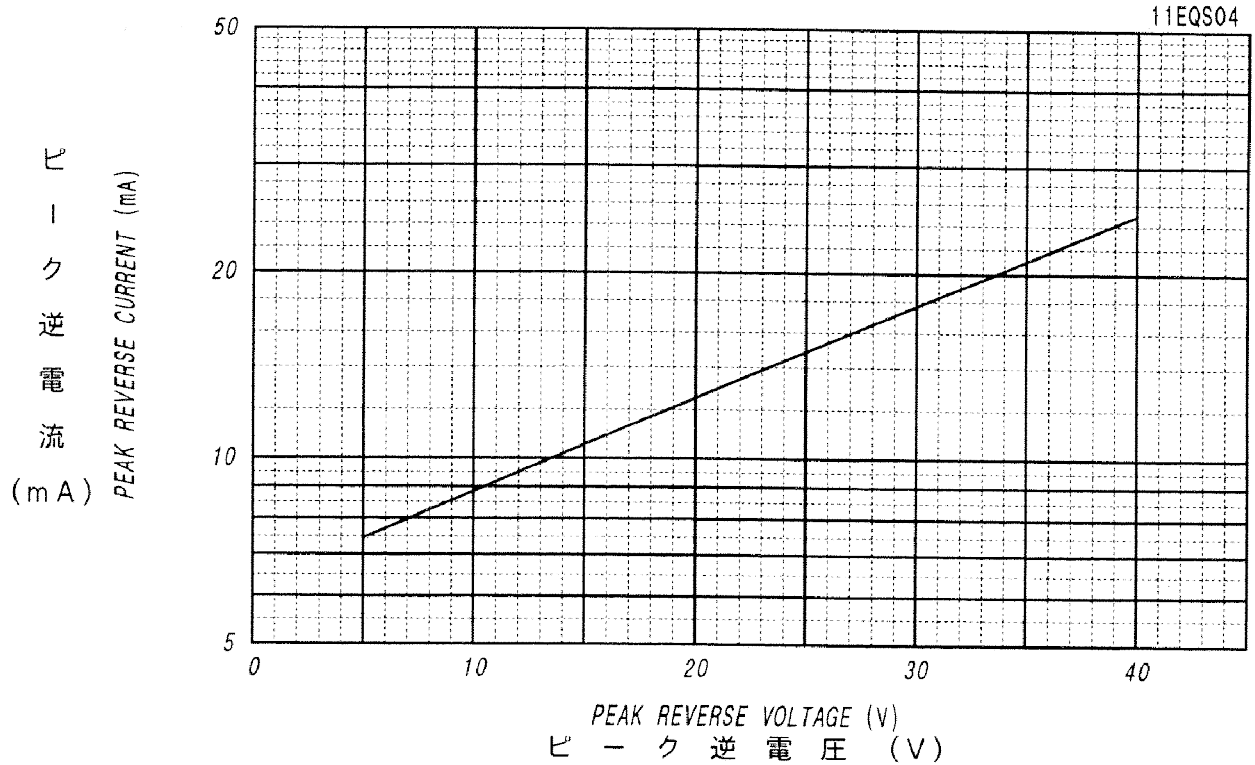


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

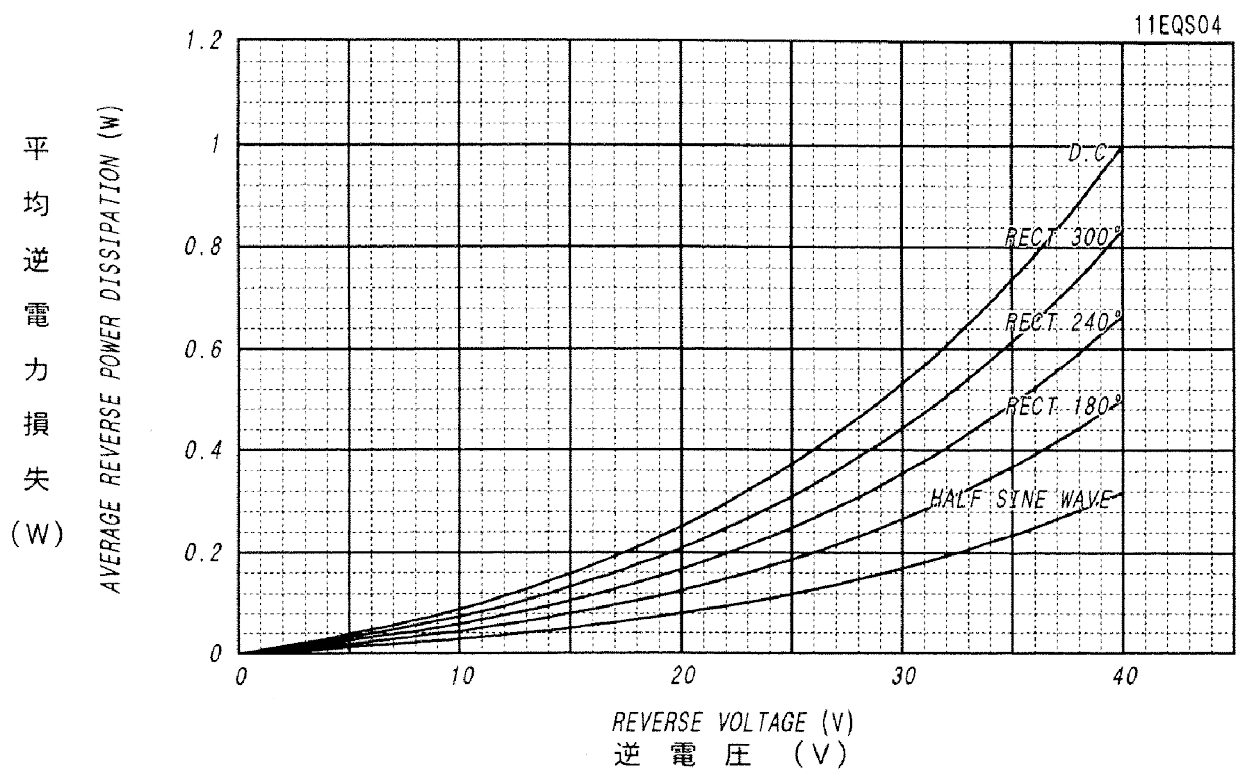


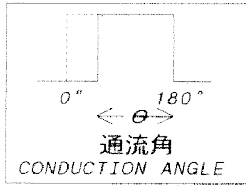
ピーク逆電流 — ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

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



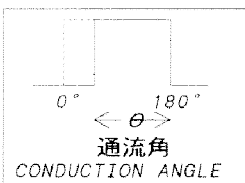
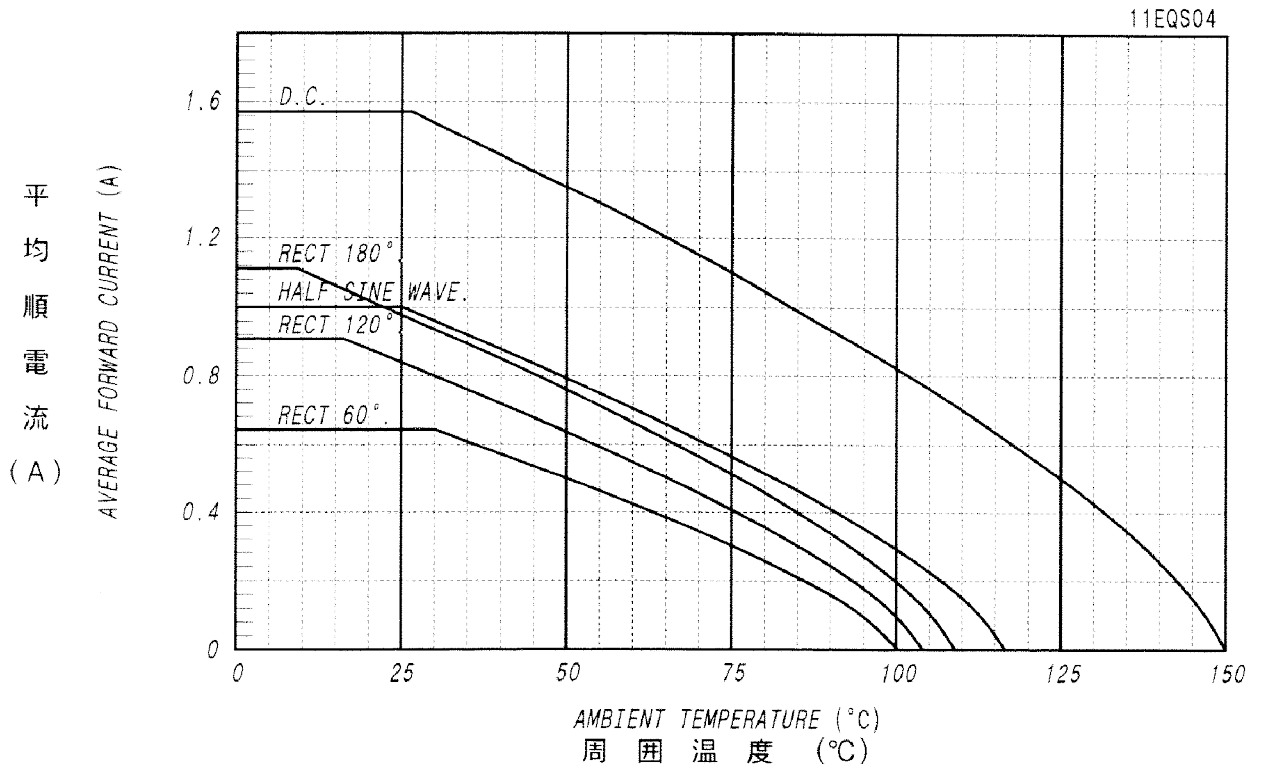
平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION





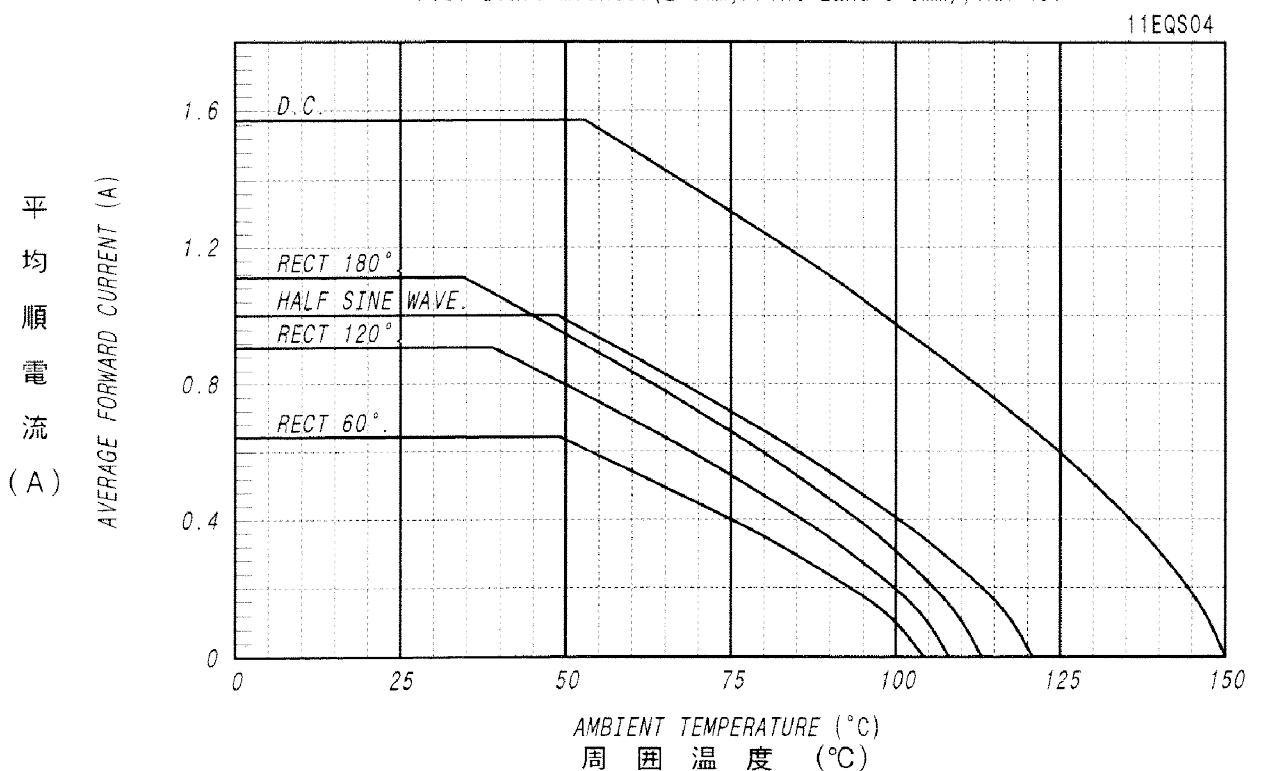
平均順電流－周圍溫度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board, $V_{RM}=40V$



平均順電流－周圍溫度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

P.C. Board mounted (L=3mm, Print Land=5*5mm), $V_{RM}=40V$



サージ順電流定格

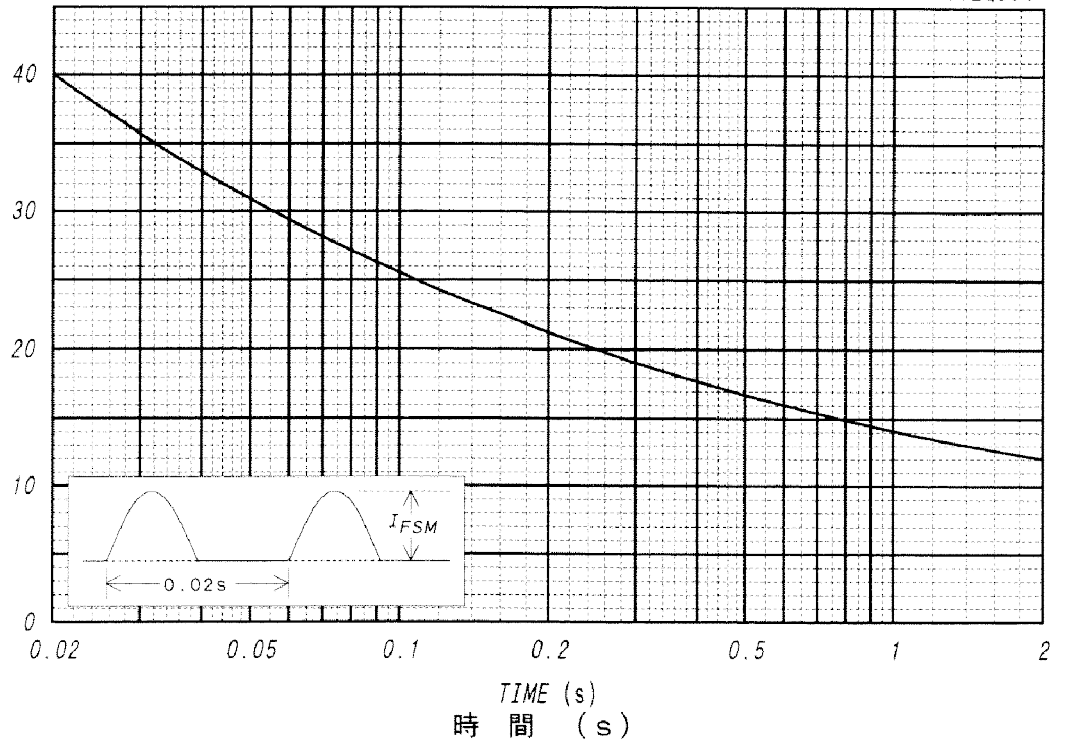
SURGE CURRENT RATINGS

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

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流
(A)

SURGE FORWARD CURRENT (A)



接合容量特性

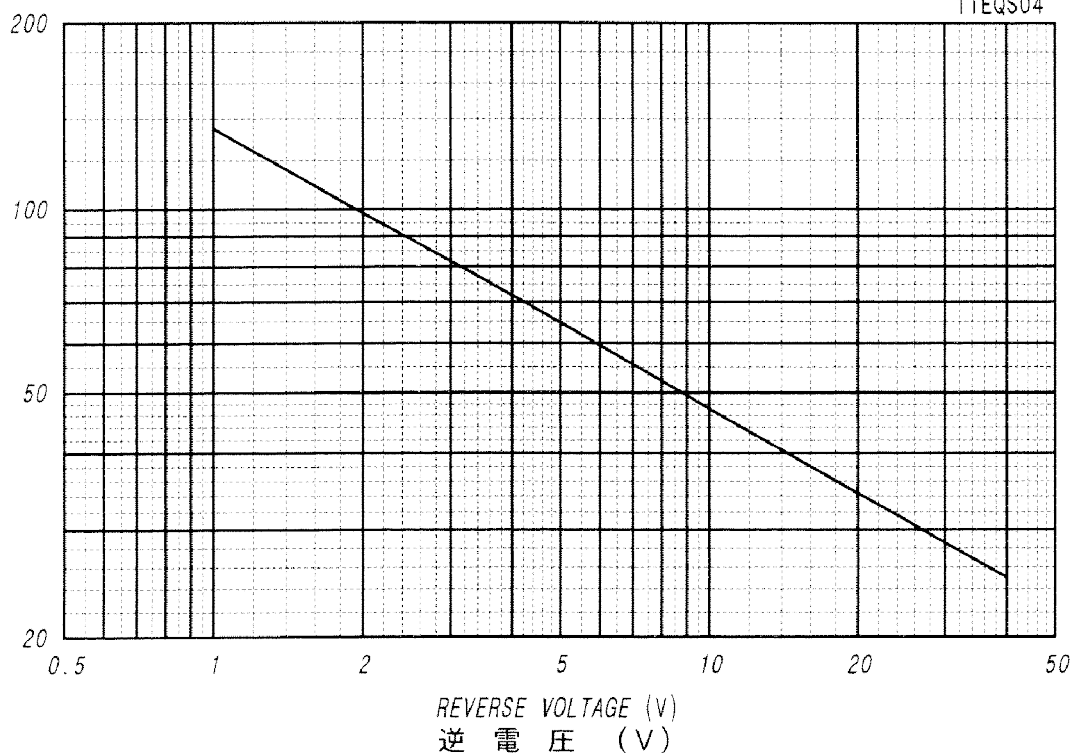
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25°C, Vm=20mVRMS, f=100kHz, Typical Value

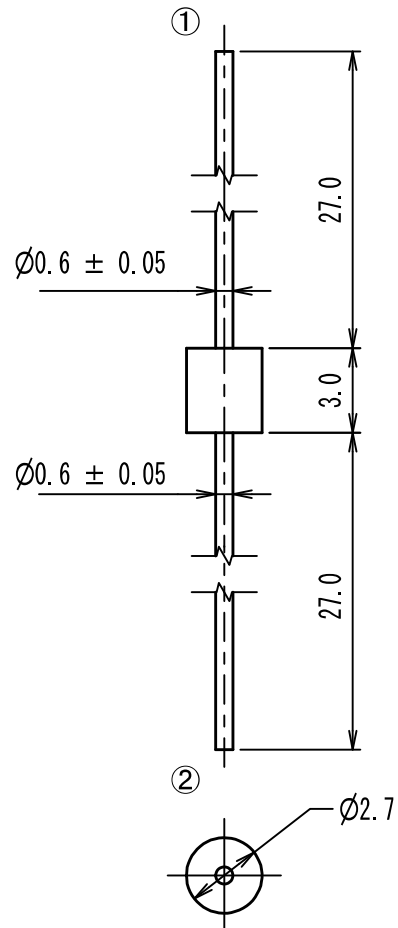
11EQS04

接
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量
(pF)

JUNCTION CAPACITANCE (pF)



3Max×φ2.7 (DO-41S)



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