

10A Avg. 65Volts

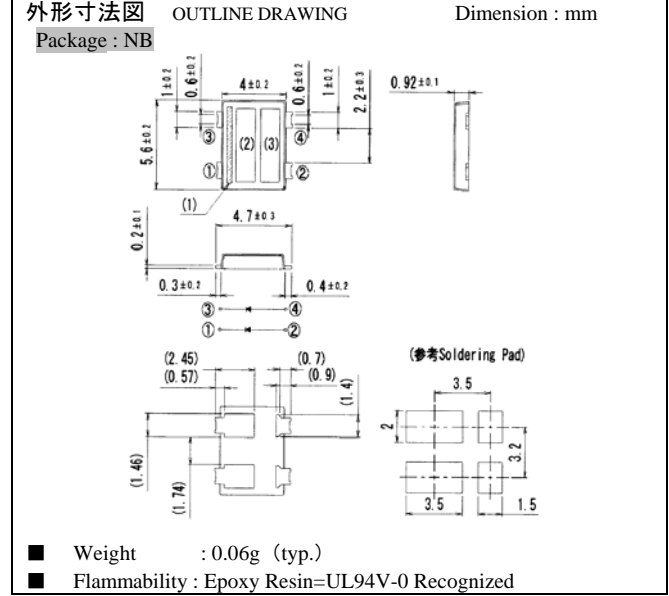
Schottky Barrier Diode

DSE-13052 (1/2)

NB10QSA065

構造：ショットキーバリアダイオード (SBD)
 Construction：Schottky Barrier Diode
 用途：高周波整流用
 Application：High-Frequency Rectification

特長 Feature
 小型 SMD Small SMD
 低熱抵抗 Lower Thermal-Resistance
 高電流 High Current Capability
 Tj=150°C Tj=150°C



■ 絶対最大定格 (表示無き場合 Ta=25°C) Absolute Maximum Ratings (Ta = 25 °C unless otherwise stated)

項目 Item	記号 Symbol	条件 Conditions	定格値 Rating	単位 Units
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	50Hz 正弦全波通電 抵抗負荷 *1	Tl=88°C, V _{RM} =30V (Tl:Lead Temperature)	10
		50Hz Full Sine Wave, Resistive Load	Ta=27°C *2 V _{RM} =30V	2.8
実効順電流 RMS Forward Current	I _{F(RMS)}	—	11.1	A
サージ順電流 Surge Forward Current	I _{FSM}	50Hz 正弦全波 1 サイクル 非繰り返し 50Hz Full Sine Wave, 1 cycle, Non-repetitive	100	A
動作接合温度範囲 Operation Junction Temperature Range	T _{jw}	—	-40~+150	°C
保存温度範囲 Storage Temperature Range	T _{stg}	—	-40~+150	°C

■ 電氣的・熱的特性 Electrical / Thermal Characteristics

項目 Item	記号 Symbol	条件 Conditions	最小値 min.	代表値 typ.	最大値 max.	単位 Units
ピーク逆電流 Peak Reverse Current	I _{RM}	V _{RM} =V _{RRM} , T _j =25°C, Per diode	—	—	400	μA
ピーク順電圧 Peak Forward Voltage	V _{FM}	I _{FM} =5.0A, T _j =25°C, Per diode	—	—	0.61	V
接合容量 Junction Capacitance	C _j	f=100kHz, V _R =10V, Per diode	—	165	—	pF
熱抵抗 Thermal Resistance	R _{th(j-l)}	接合部・リード間 Junction to Lead	—	—	7	°C/W
	R _{th(j-a)}	接合部・周囲間 Junction to Ambient	*2 (ガラスエポキシ基板実装)	—	60	°C/W

*1 : カソード共通動作による / Common Cathode Operation

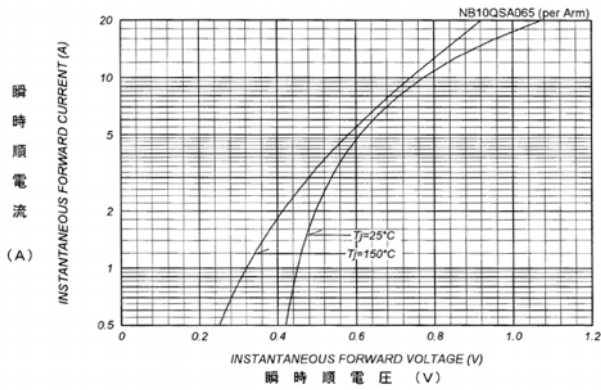
*2 : ガラスエポキシ基板実装 / Glass-Epoxy Substrate Mounted (Soldering Land=2.0*1.5mm,2.0*3.5mm,Both Sides)

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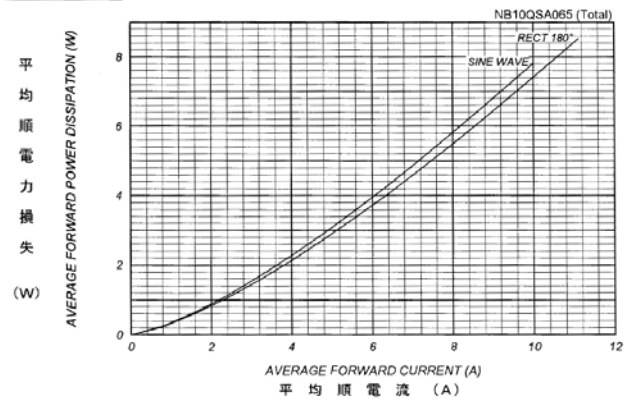
DSE-13052 (2/2)

■ 特性図 Characteristics Diagrams

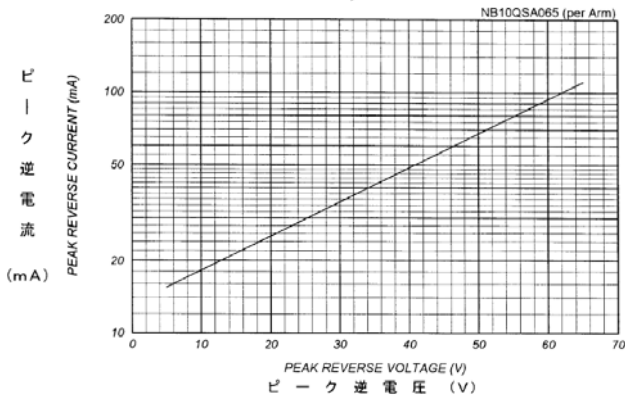
順電圧特性
FORWARD CURRENT VS. VOLTAGE



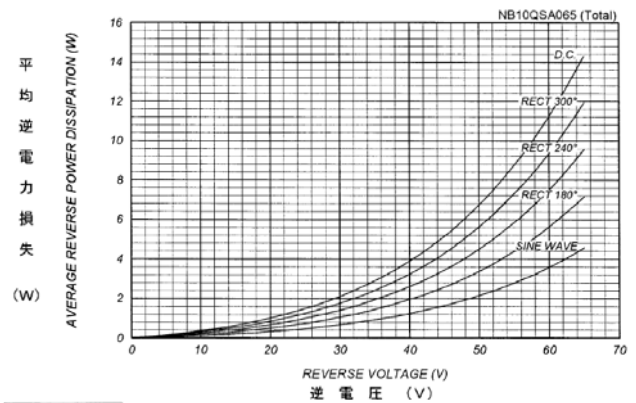
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION



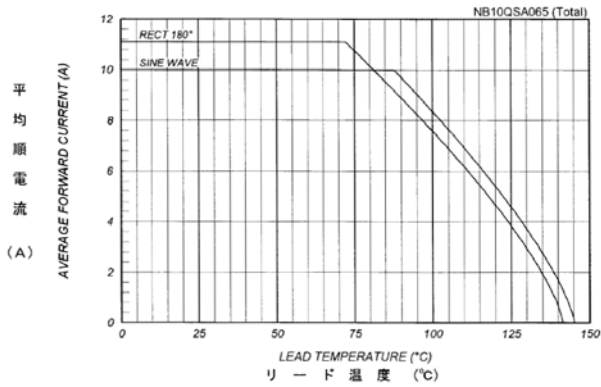
ピーク逆電流 - ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE
Tj = 150 °C



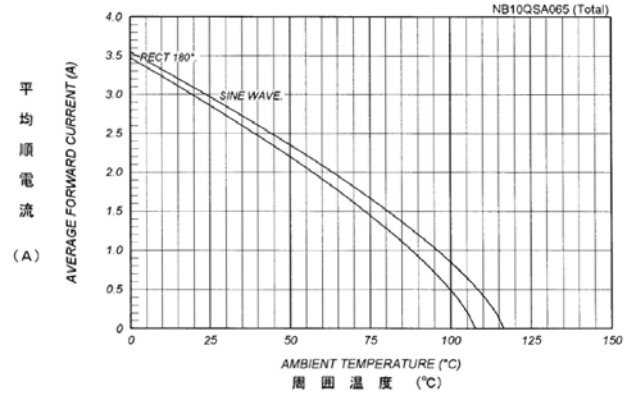
平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION



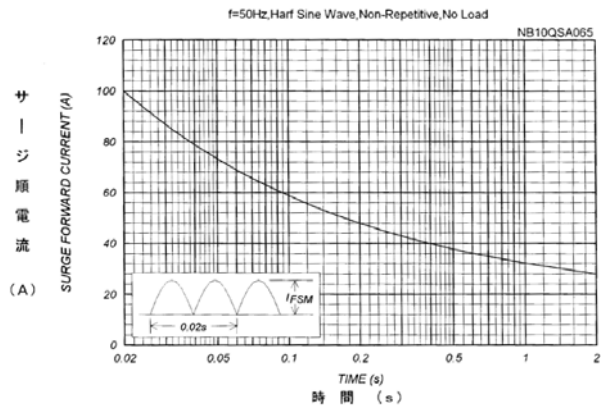
平均順電流 - リード温度定格
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE
V_{RM} = 30V



平均順電流 - 周囲温度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE
Glass-Epoxy Substrate Mounted (Soldering Lead=2.0×1.5mm, 2.0×3.5mm), V_{RM}=30V



サージ順電流定格
SURGE CURRENT RATINGS
f=50Hz, Half Sine Wave, Non-Repertive, No Load



接合容量特性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE
Tj = 25°C, V_m = 20mV_{RM}, f = 100kHz, Typical Value

