

10A 45V $T_{jw}150^{\circ}\text{C}$

カソードコモン SBD
Cathode common

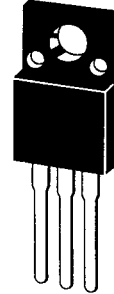
Fully Molded similar to TO-220AB

FCHS10A045 仕様書

Specification

日本インター株式会社
Nihon Inter Electronics Corporation

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



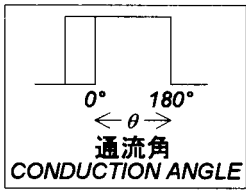
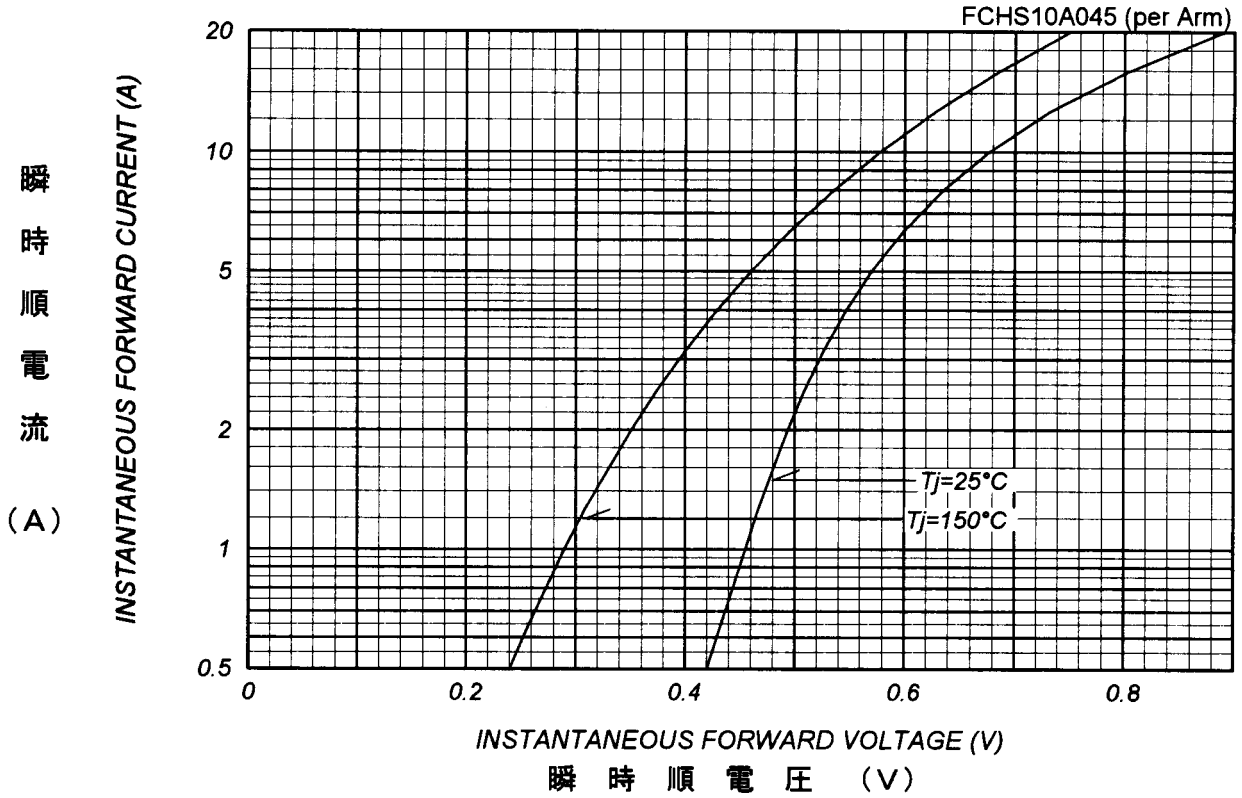
■ 最大定格 MAXIMUM RATINGS $T_a = 25^{\circ}\text{C}$: Unless otherwise specified

Item	Symbol	Condition	Max. Rated value	Unit
くり返しピーク逆電圧 Repetitive peak reverse voltage	V_{RRM}		45	V
平均整流電流 Average rectified forward current	I_O	50Hz 正弦全波, 抵抗負荷 $T_c = 130^{\circ}\text{C}$ $V_{RM} = 20\text{V}$ 50Hz full sine wave, Resistance load	10	A
実効順電流 R.M.S. forward current	I_{FRMS}		11.1	A
サージ順電流 Surge forward current	I_{FSM}	50Hz 正弦全波 1 サイクル 非くり返し 50Hz full sine wave 1 cycle, non repetitive	120	A
動作接合温度範囲 Operating junction temperature range	T_{jw}		-40~+150	$^{\circ}\text{C}$
保存温度範囲 Storage temperature range	T_{stg}		-40~+150	$^{\circ}\text{C}$
締付けトルク Mounting Torque	F_{tor}	推奨値 Recommended Value	0.5	N·m

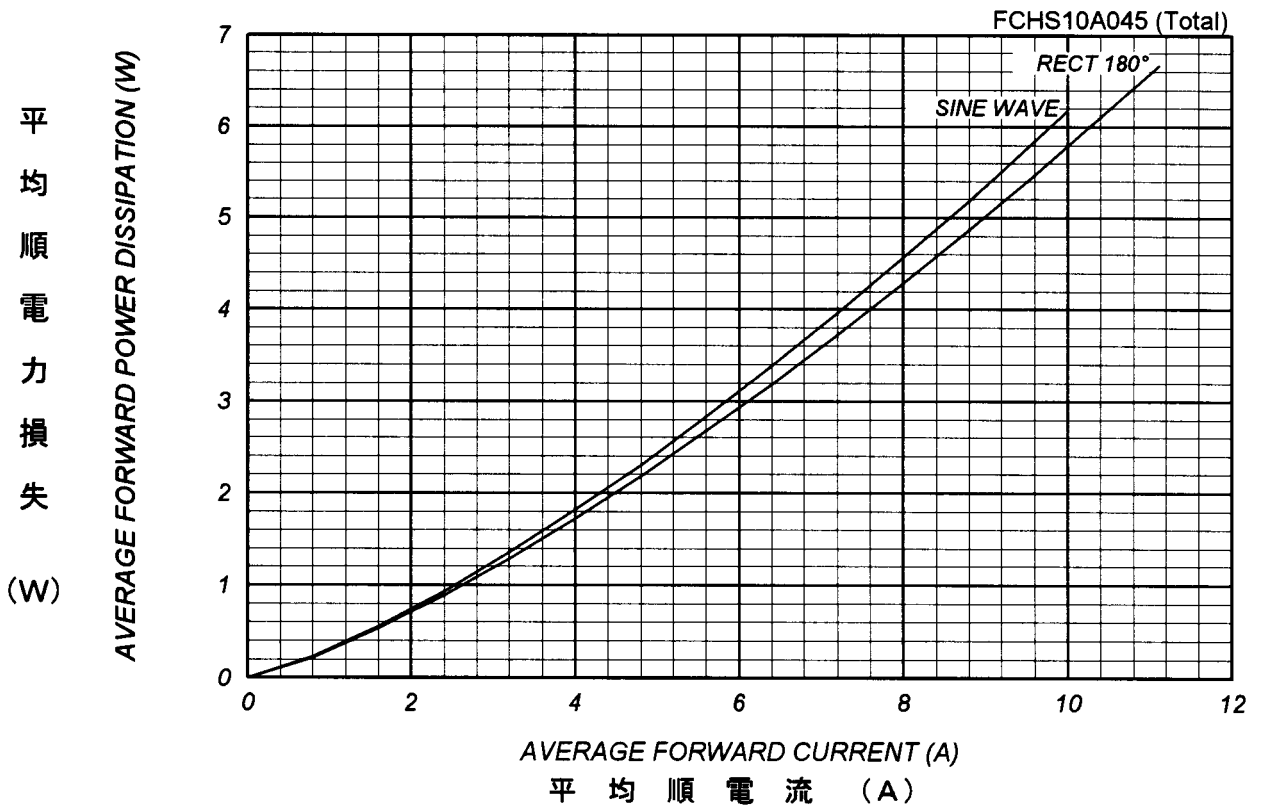
■ 電氣的・熱的特性 ELECTRICAL/THERMAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
ピーク逆電流 Peak reverse current	I_{RM}	$T_j = 25^{\circ}\text{C}$ $V_{RM} = V_{RRM}$ 1 素子あたり per diode	-	-	100	μA
ピーク順電圧 Peak forward voltage	V_{FM}	$T_j = 25^{\circ}\text{C}$ $I_{FM} = 5\text{A}$ 1 素子あたり per diode	-	-	0.57	V
熱抵抗 Thermal resistance	$R_{th(j-c)}$	接合部・ケース間 Junction to case	-	-	3.0	$^{\circ}\text{C/W}$
熱抵抗 Thermal resistance	$R_{th(c-f)}$	ケース・フィン間 Case to fin	-	-	1.5	$^{\circ}\text{C/W}$

順電壓特性
FORWARD CURRENT VS. VOLTAGE

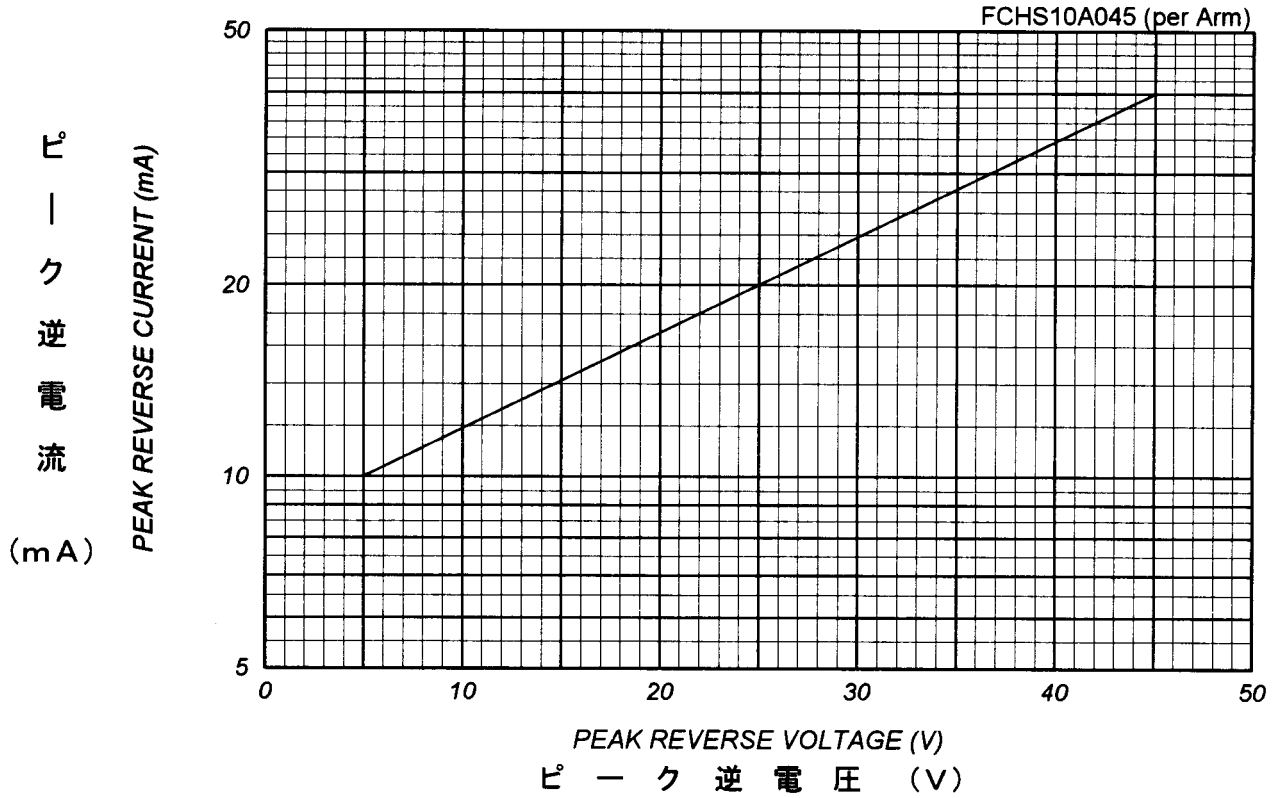


平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

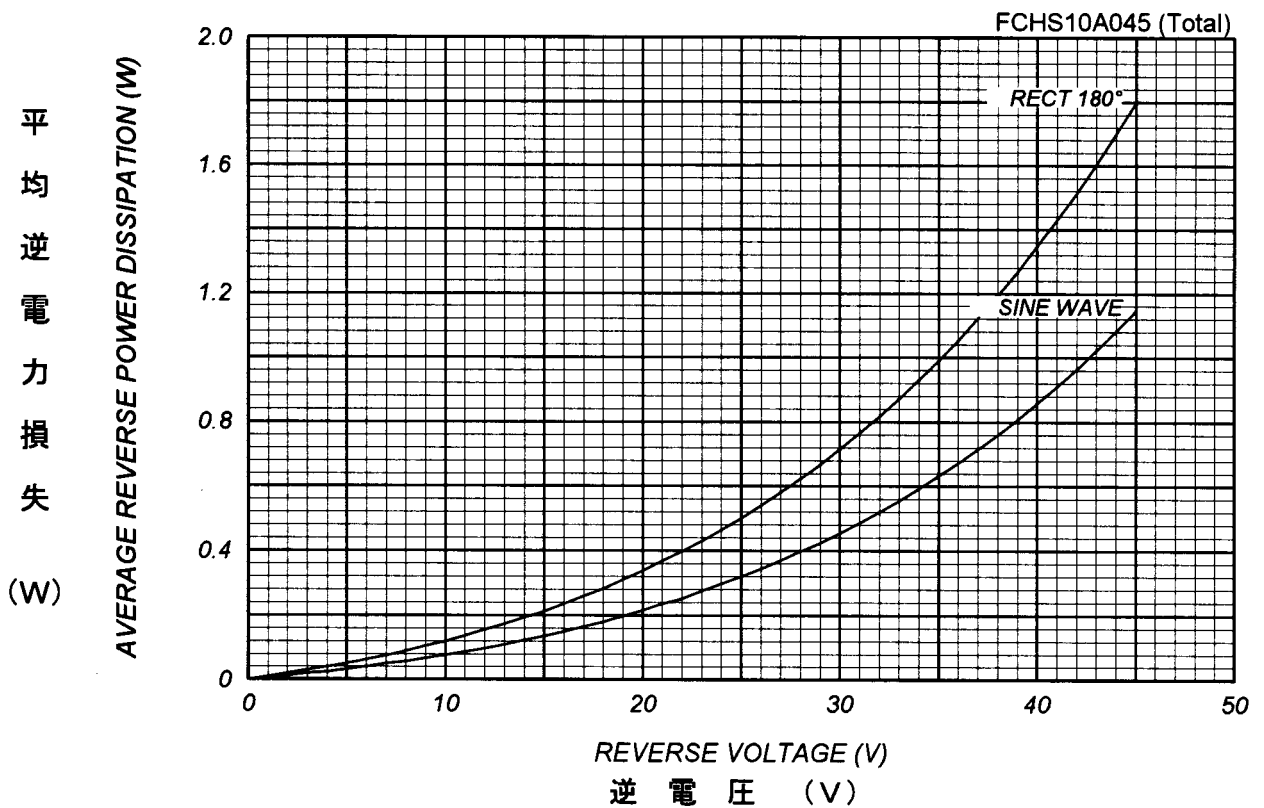


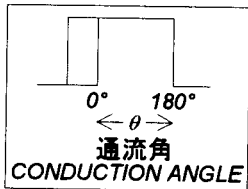
ピーク逆電流 - ピーク逆電圧特性
 PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

T_j = 150 °C



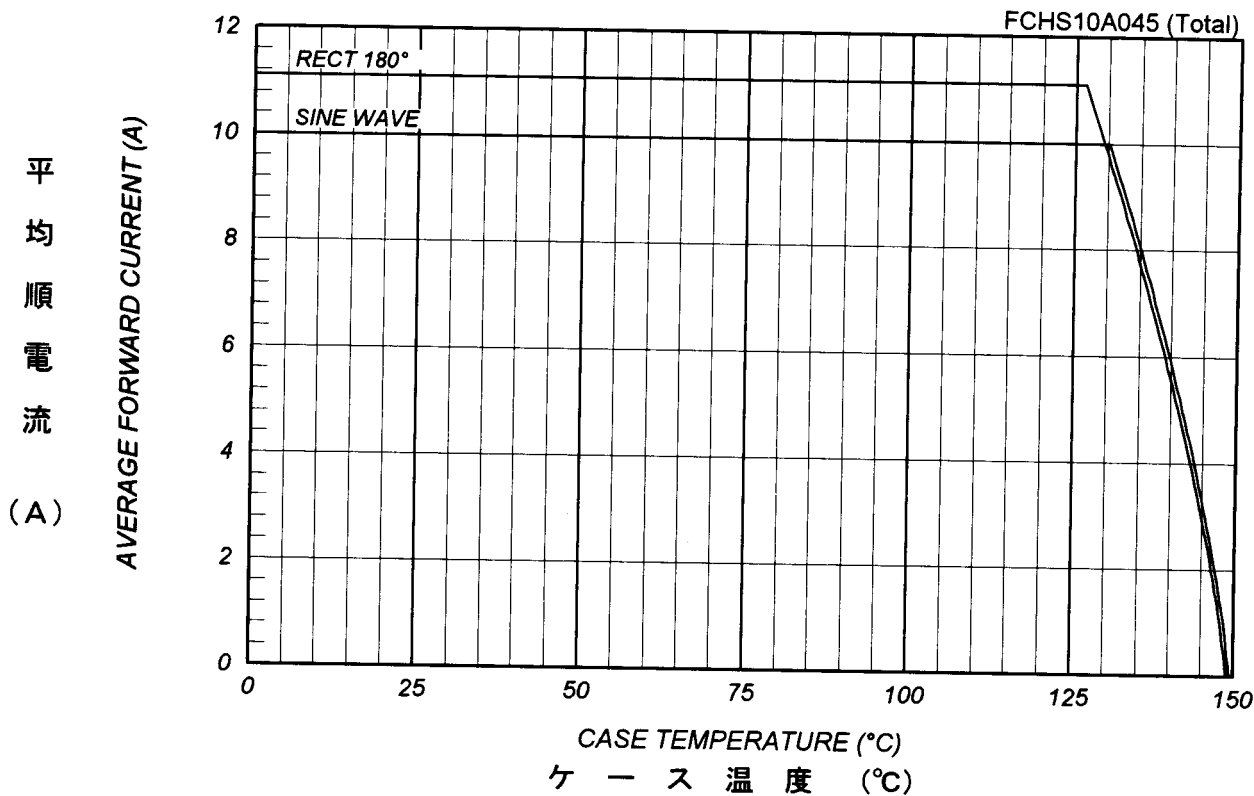
平均逆電力損失
 AVERAGE REVERSE POWER DISSIPATION





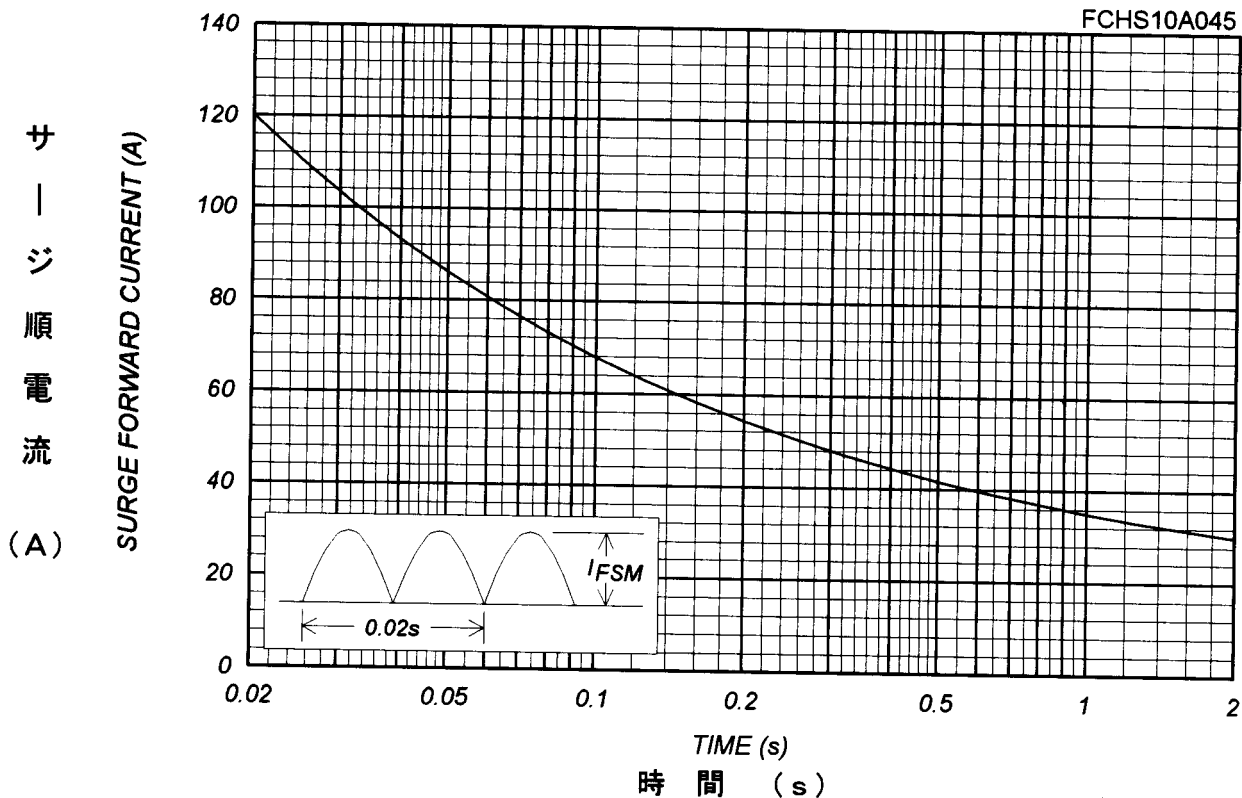
平均順電流 - ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

$V_{RM}=20V$



サージ順電流定格
SURGE CURRENT RATINGS

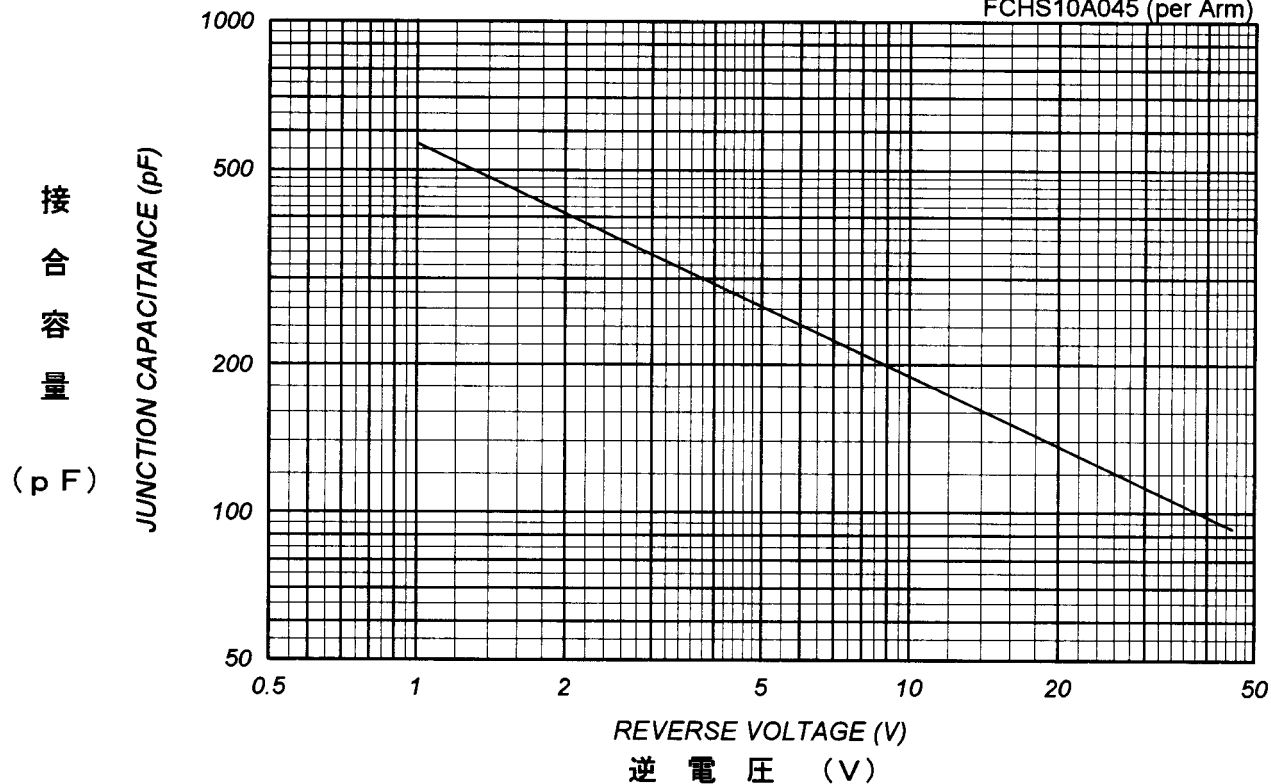
f=50Hz, Sine Wave, Non-Repetitive, No Load

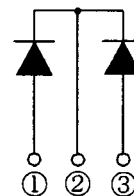
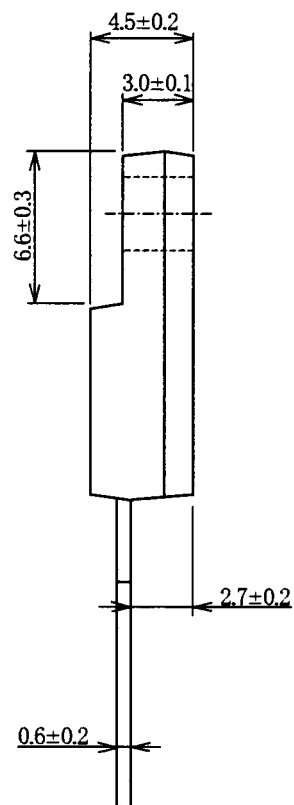
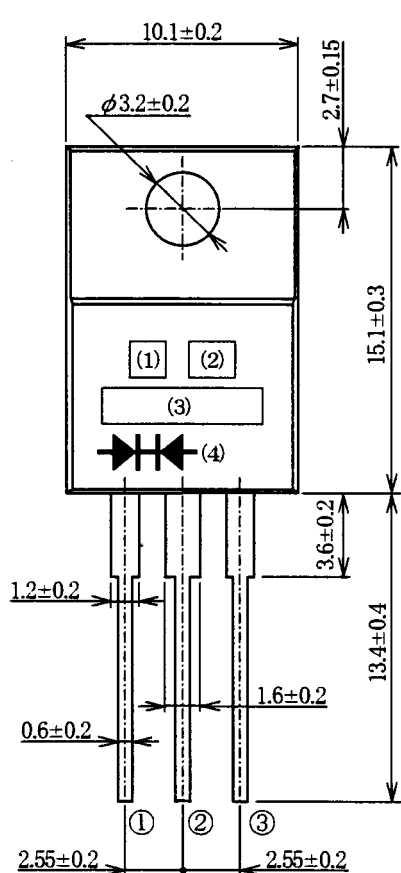


接合容量特性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

FCHS10A045 (per Arm)





表示 Marking

- (1) 社名略マーク N Manufacturer's Mark N
- (2) ロット番号 Lot No.

製造年	西暦年代ノ下ニ桁ヲ表示スル												
製造月	月	1	2	3	4	5	6	7	8	9	10	11	12
	記号	A	B	C	D	E	F	G	H	I	J	K	L

(例) 2007年10月→7J

- (3) 型名 Type
FCHS10A「 」
- (4) 極性 Polarity

材料 Materials

- モールド材 Mold
エポキシ樹脂 (UL94V-0認定品)
Epoxy Resin (UL94V-0 recognized)
- リード端子 Lead
銅-ニッケルメッキ+錫メッキ
Cu-Ni plated+Sn plated

質量 Weight : 1.75g