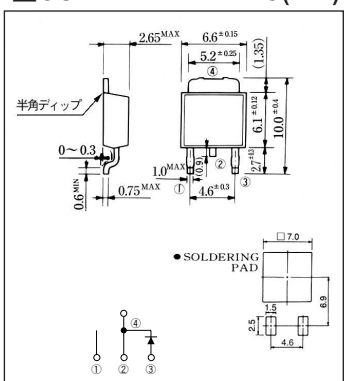
3A Avg. 100 Volts SBD EA30QS10-F

■最大定格 Maximum Ratings

Item		Symbol	Conditions			Unit
くり返しピーク逆電圧 Repetitive Peak Reverse Voltage		V_{RRM}	100			V
平均整流電流 Average Rectified Forward Current	P.C.Board mounted*	I_O	50Hz、正弦半波通電抵抗負荷 50Hz Half Sine Wave Resistive Load	Ta=34℃	1.6	A
	–			Tc=133℃	3.0	A
実効順電流 R.M.S. Forward Current		$I_{F(RMS)}$	4.71			A
サージ順電流 Surge Forward Current		I_{FSM}	45 50Hz正弦半波，1サイクル，非くり返し 50Hz Half Sine Wave,1cycle, Non-repetitive			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			℃

■OUTLINE DRAWING(mm)



■APPROX. NET WEIGHT:0.3g

■電気的・熱的特性 Electrical/Thermal Characteristics

Item	Symbol	Conditions		Min.	Typ.	Max.	Unit
ピーク逆電流 Peak Reverse Current	I_{RM}	T_j=25℃, V_{RM}=V_{RRM}		—	—	1	mA
ピーク順電圧 Peak Forward Voltage	V_{FM}	T_j=25℃, I_{FM}=3A		—	—	0.85	V
熱抵抗 Thermal Resistance	$R_{th(j-a)}$	接合部・周囲間 Junction to Ambient	基板実装* P.C.Board mounted*	—	—	80	℃/W
	$R_{th(j-c)}$	接合部・ケース間 Junction to Case		—	—	6	℃/W

＊Print Land=20×20mm

■定格・特性曲線

FIG.1
順電圧特性
FORWARD CURRENT VS. VOLTAGE

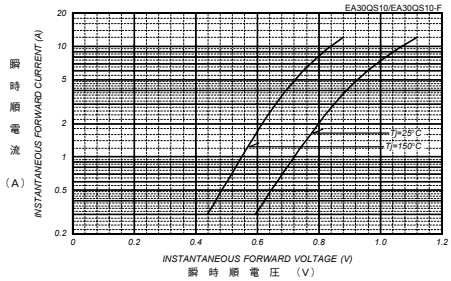


FIG.2
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION

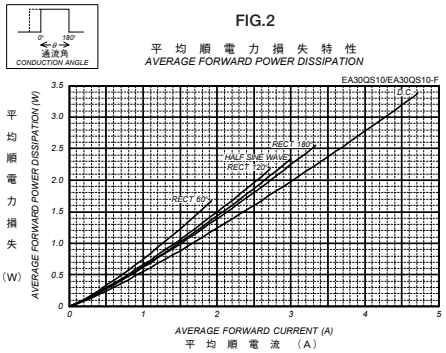


FIG.3
ピーク逆電流 ー ピーク逆電圧特性
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

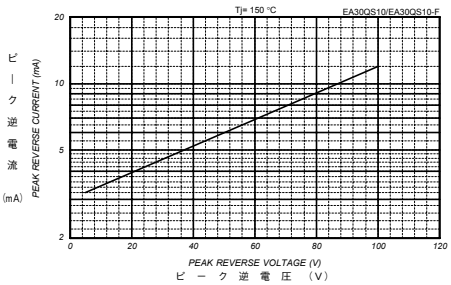


FIG.4
平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION

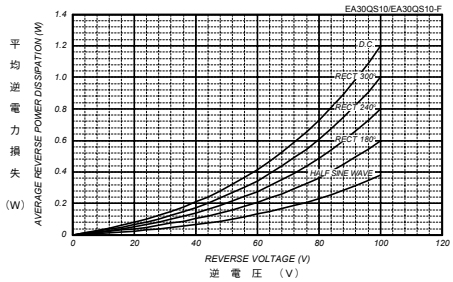


FIG.5
平均順電流ーケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

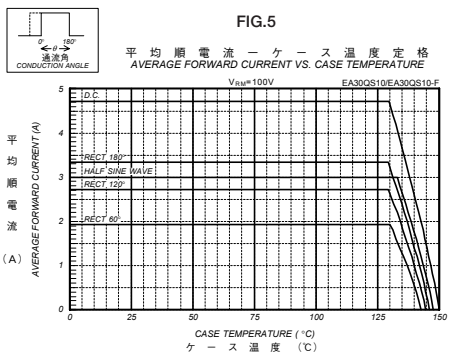


FIG.6
平均順電流ー周囲温度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

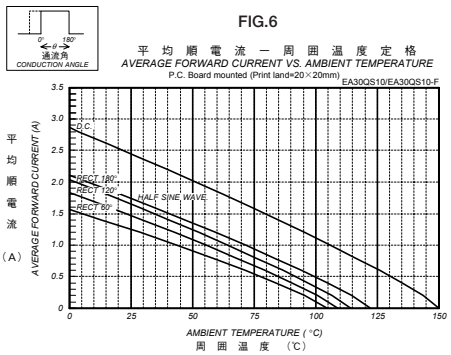


FIG.7
サージ順電流定格
SURGE CURRENT RATINGS

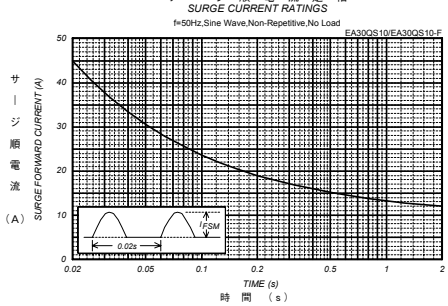
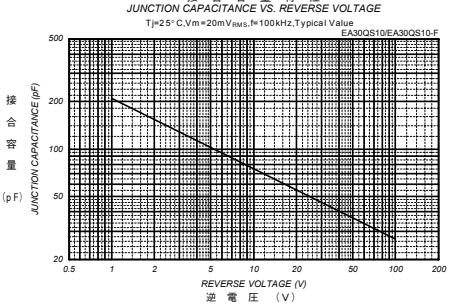



FIG.8
接合容量特性
JUNCTION CAPACITANCE VS. REVERSE VOLTAGE