EC30QSA045

SURFACE MOUNT SCHOTTKY BARRIER DIODES

VOLTAGE RANGE: 45V
CURRENT: 3A

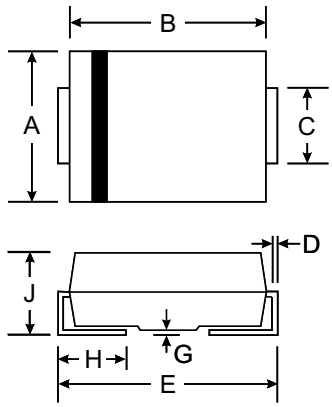
Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Plastic Material - UL Flammability Classification 94V-0
- High Reliability
- High Current Capability and Low VF
  Submersible Temperature of 265°C for 10 Seconds in Solder Bath

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)

RoHS COMPLIANT



SMB(DO-214AA)		
Dim	**Min**	**Max**
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Average Rectified Forward Current 50Hz Half Sine Wave Resistive Load Ta=25℃* V_{RM}=20V	I_O	1.9	A
Average Rectified Forward Current 50Hz Half Sine Wave Resistive Load Tl=102℃ V_{RM}=20V	I_O	3.0	A
R.M.S.Forward Current	$I_{F(RMS)}$	4.71	A
Surge Forward Current 50Hz Half Sine Wave,Icycle,Non-repetitive	I_{FSM}	60	A
Operating Junction Temperature Range	T_{jw}	−40～+150	℃
Storage Temperature Range	T_{stg}	−40～+150	℃

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic		Symbol	Min.	Typ.	Max.	Unit
Peak Reverse Current T_j=25℃, V_{RM}=45V		I_{RM}	—	—	300	μA
Peak Forward Voltage T_j=25℃, I_{FM}=3A		V_{FM}	—	—	0.55	V
Thermal Resistance	Junction to Ambient Alumina Substrate Mounted *	$R_{th(j-a)}$	—	—	108	℃/W
	Junction to Lead —	$R_{th(j-l)}$		—	23	℃/W

FIG.1

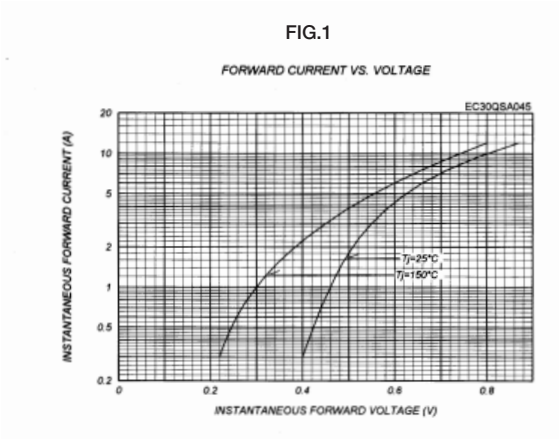


FIG.2

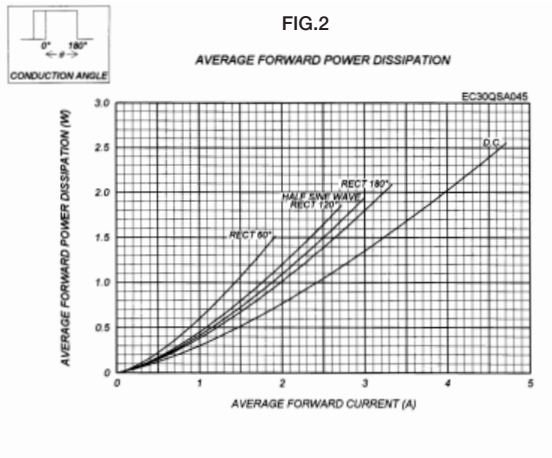


FIG.3

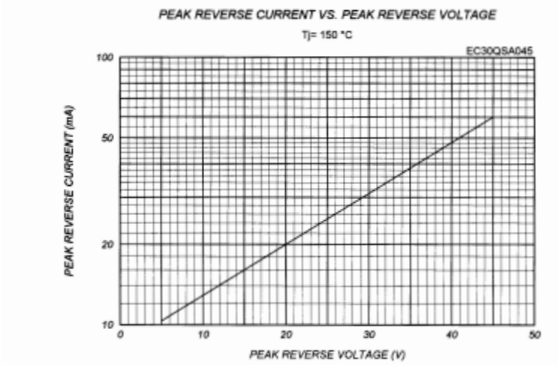


FIG.4