

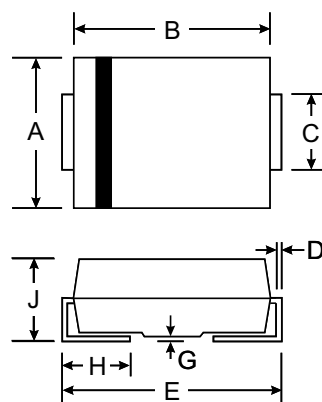
VOLTAGE RANGE: 60V
CURRENT: 3.0 A

Features

- Miniature Size, Surface Mount Device
- Low Forward Voltage Drop
- High Surge Capability
- Low Power Loss, High Efficiency
- Packaged in 12mm Tape and Reel
- Not Rolling During Assembly

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.)



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

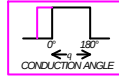
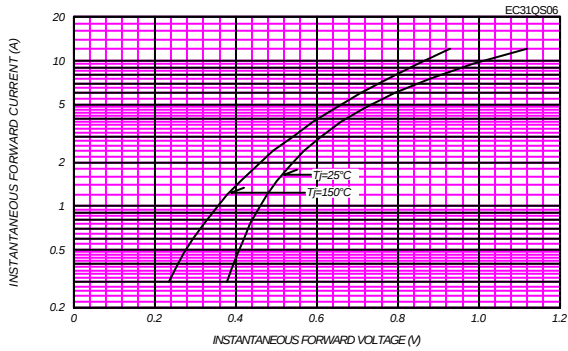
Characteristic	Symbol	Limits	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Average Rectified Output Current 50Hz Half Sine Wave Resistive Load	I _o	1.0 3.0	A
R.M.S. Forward Current	I _{F(RMS)}	4.71	A
Surge Forward Current 50Hz Half Sine Wave, I _c cycle, Non-repetitive	I _{FSM}	50	A
Operating Junction Temperature Range	T _{jw}	-40 to +150	°C
Storage Temperature Range	T _{stg}	-40 to +150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

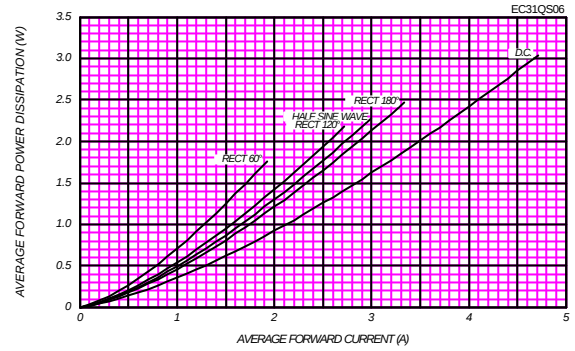
Characteristic	Symbol	Min	Typ	Max	Unit
Peak Reverse Current T _j = 25 °C, V _{RM} = V _{RRM}	I _{RM}	-	-	3	mA
Peak Forward Voltage T _j = 25 °C, I _{FM} = 3.0A	V _{FM}	-	-	0.61	V
Thermal Resistance Junction to Ambient *1	R _{th(j-a)}	-	-	108	°C /W
	R _{th(j-l)}	-	-	23	

*1 Alumina Substrate Mounted
 Soldering Lands=2x2mm, Both Sides

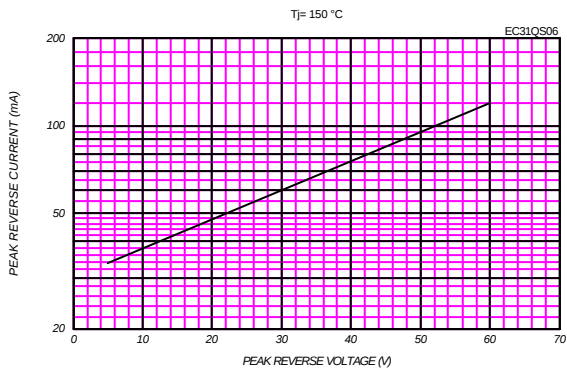
FORWARD CURRENT VS. VOLTAGE



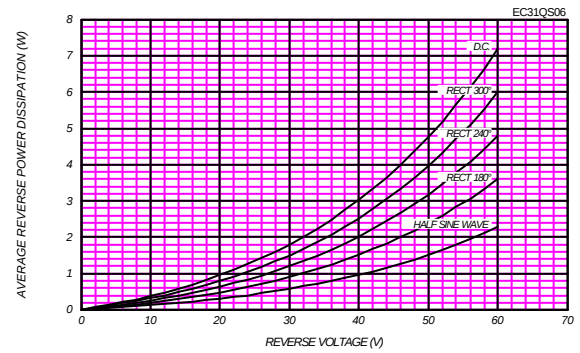
AVERAGE FORWARD POWER DISSIPATION



PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

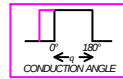
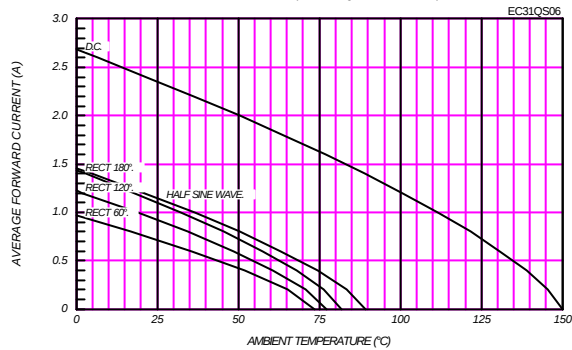


AVERAGE REVERSE POWER DISSIPATION



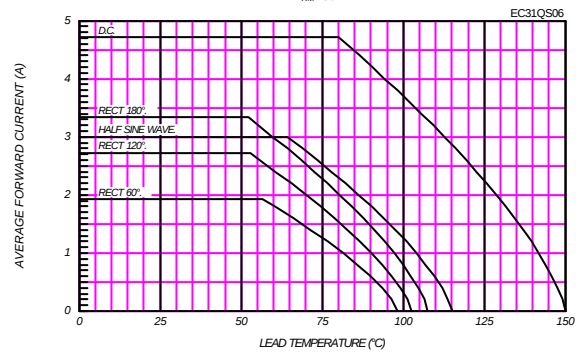
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Alumina Substrate Mounted (Soldering Land=2x2mm), $V_{RM}=60\text{V}$



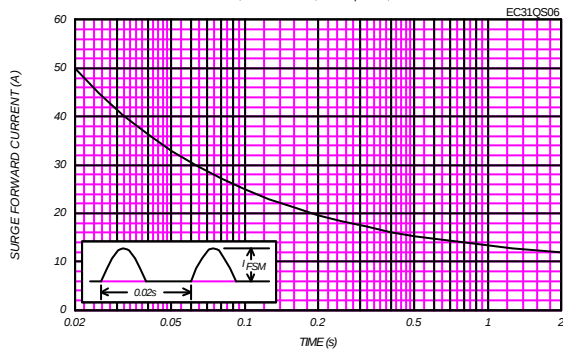
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

$V_{RM}=60\text{V}$



SURGE CURRENT RATINGS

$f=50\text{Hz}$, Half Sine Wave, Non-Repetitive, No Load



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

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

