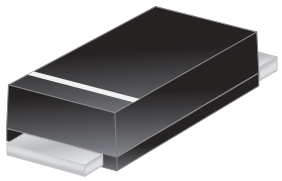
EBRP5L300AF

Excellen Schottky Barrier Rectifiers



DO-221AC(SMAF)

Primary Characteristics		
I_F	5	A
V_{RRM}	300	V
I_{FSM}	100	A
V_F	0.92	V
T_J max	150	°C

Features

- High current capability
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC

Mechanical Data

- Case: DO-221AC(SMAF)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.035 grams (approximate)

Ordering Information

Part No.	Remark	Package	Packing
EBRP5L300AF	General	SMAF	10000 / Tape & Reel
EBRP5L300AF-H	Halogen Free		
EBRP5L300AF-Q	AEC-Q101 qualified		

Maximum Ratings (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	EBRP5L300AF	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	300	V
Maximum RMS voltage	V_{RMS}	210	V
Maximum DC blocking voltage	V_{DC}	300	V
Maximum average forward rectified current	I_F	5	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100	A
Maximum Instantaneous Forward Voltage IF=2A @ 25°C IF=5A @ 25°C	V_F	 0.77 Typ. 0.92 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	I_R	0.2 5	mA
Typical Junction Capacitance(NOTE1)	C_j	60	pF
Typical Thermal Resistance	$R_{\theta JC}$	40	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C
Marking Code		P5L300AF、5L300AF	

NOTES:

1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

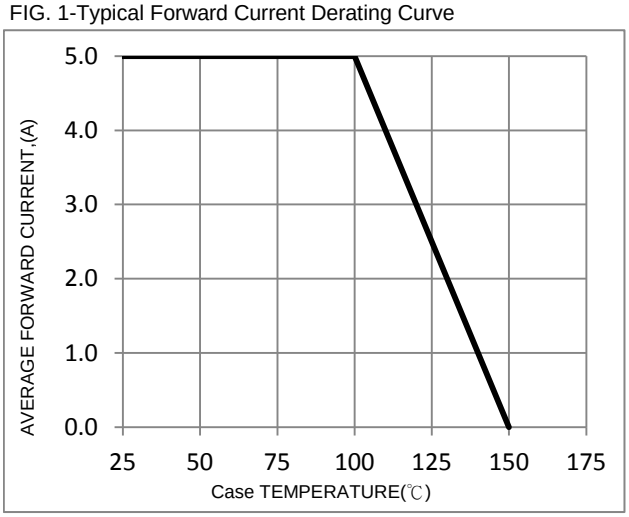


FIG. 2-Typical Forward Characteristics

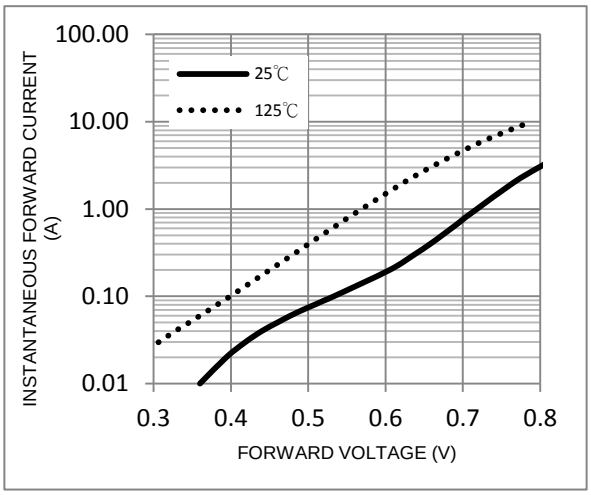


FIG. 3-Maximum Non-Repetitive Forward Surge Current

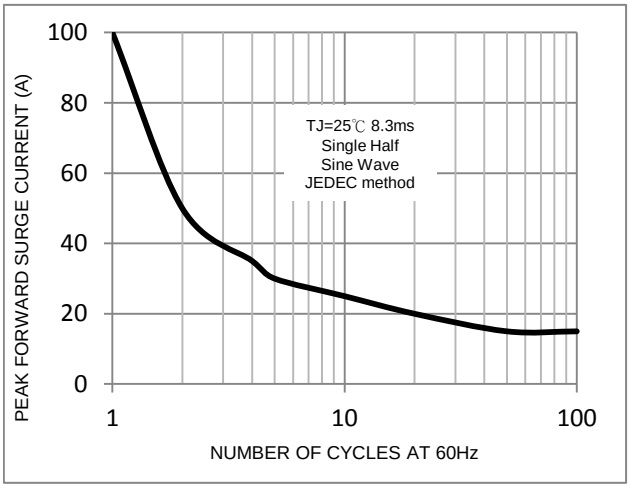


FIG. 4-Typical Reverse Characteristics

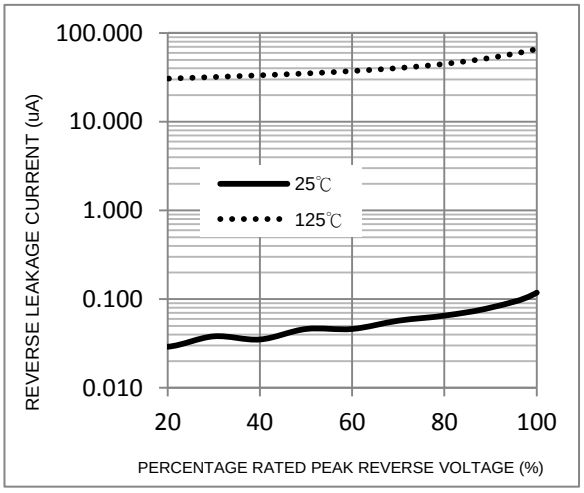
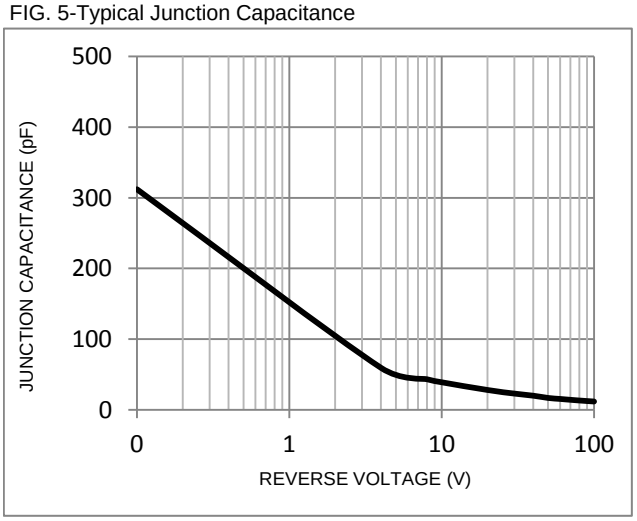


FIG. 5-Typical Junction Capacitance



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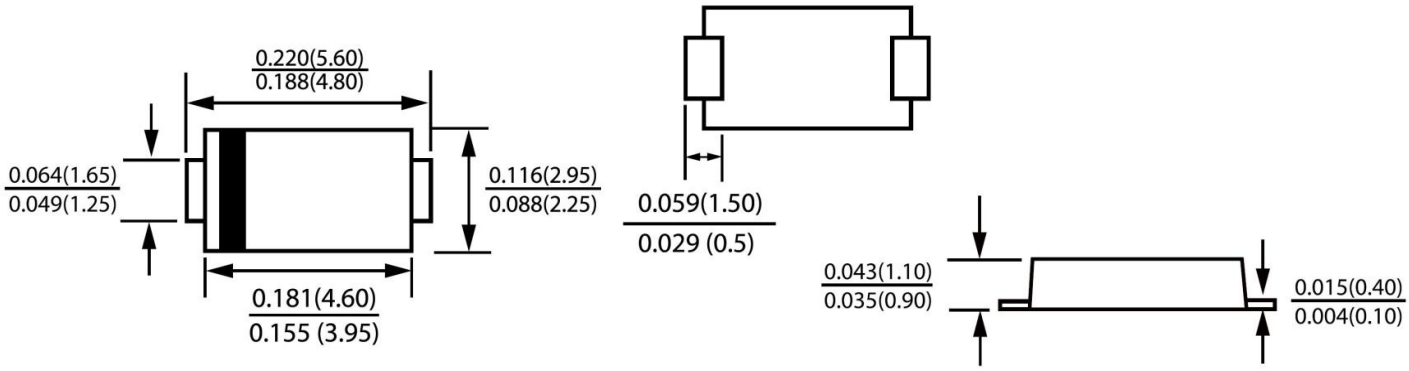
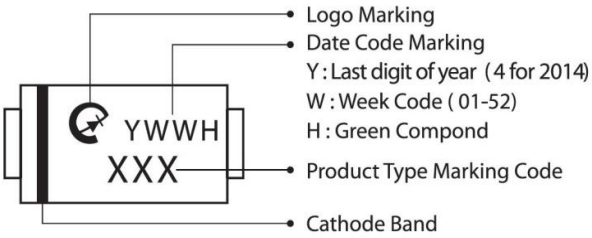
Package Outline Dimensions



DO-221AC(SMAF)

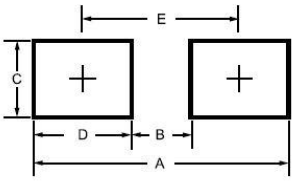
Dimensions in inches and (millimeters)

Marking Information



Suggested Pad Layout

Dimension \ Outline	SMAF (DO-221AC)
A	6.50
B	1.50
C	1.70
D	2.50
E	4.00



Tape & Reel Specification

ITEM	SYMBOL	SMAF(mm) DO-221AC
Carrier width	A	3±0.1
Carrier length	B	5.6±0.1
Carrier depth	C	1.2±0.1
Sprocket hole	d	1.50±0.1
Reel outside diameter	D	330±2.0
Feed hole diameter	D0	13.5±1
Reel inner diameter	D1	50 (min.)
Sprocket hole position	E	1.75±0.1
Punch hole position	F	5.5±0.05
Sprocket hole pitch	P	4.0±0.1
Sprocket hole pitch	Po	4.0±0.05
Embossment center	P1	2.0±0.05
Overall tape thickness	T	0.25±0.05
Tape width	W	12.0±0.2
Reel width	W2	18.4 (max)
Reel width	W1	14.4 (max)