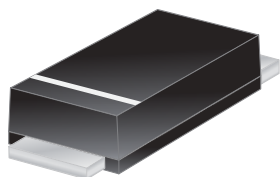




# P3E60AF



## Excellent Schottky Barrier Rectifiers



**DO-221AC(SMAF)**

Features
<ul style="list-style-type: none"> <li>• High current capability</li> <li>• High surge current capability</li> <li>• Low reverse current</li> <li>• Component in accordance to RoHS 2002/95/EC</li> <li>• AEC-Q101 qualified</li> </ul>

Ordering Information		
Part No.	Package	Packing
P3E60AF	SMAF	10000 / Tape & Reel

Device P/N	
Part Number	Remark
P3E60AF	General
P3E60AF-H	Halogen Free
P3E60AF-Q	Automotive

Primary Characteristics		
$I_F$	3	A
$V_{RRM}$	60	V
$I_{FSM}$	100	A
$V_F$	0.5	V
$T_J \text{ max}$	150	°C

Mechanical Data
<ul style="list-style-type: none"> <li>• Case: DO-221AC(SMAF)</li> <li>• Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0</li> <li>• Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208</li> <li>• Polarity: Cathode Band</li> <li>• Weight: 0.035 grams (approximate)</li> </ul>

Maximum Ratings (TA=25°C unless otherwise noted)			
PARAMETER	SYMBOL	P3E60AF	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	60	V
Maximum RMS voltage	$V_{RMS}$	42	V
Maximum DC blocking voltage	$V_{DC}$	60	V
Maximum average forward rectified current	$I_F$	3.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100.0	A
Maximum Instantaneous Forward Voltage $I_F=3A @ 25^\circ C$	$V_F$	0.5	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C	$I_R$	0.5 10	mA
Typical Junction Capacitance(NOTE1)	$C_j$	160	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		5L60AF · P5L60AF	

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

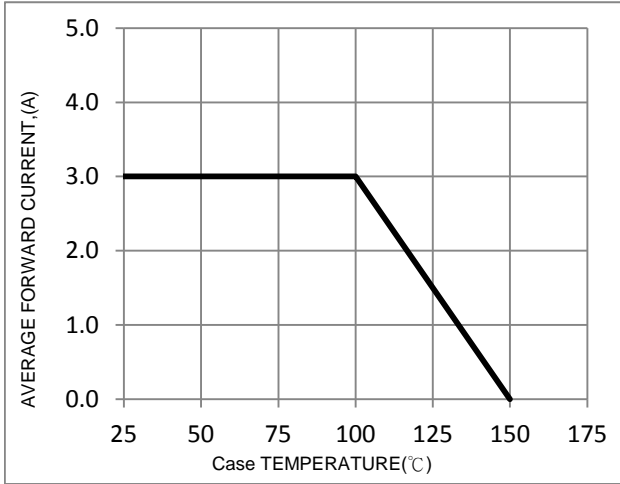


FIG. 2-Typical Forward Characteristics

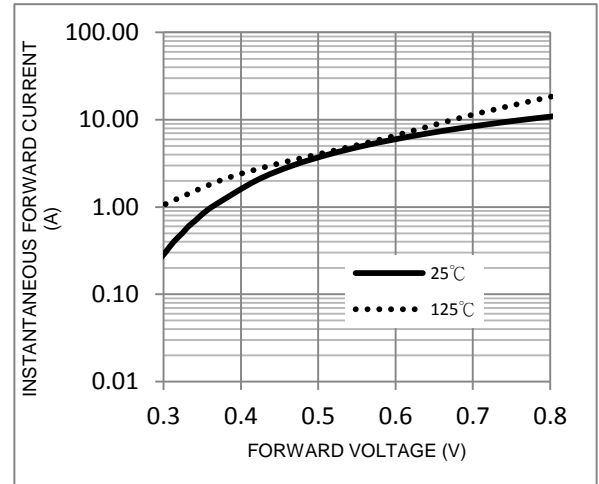


FIG. 3-Maximum Non-Repetitive Forward Surge Current

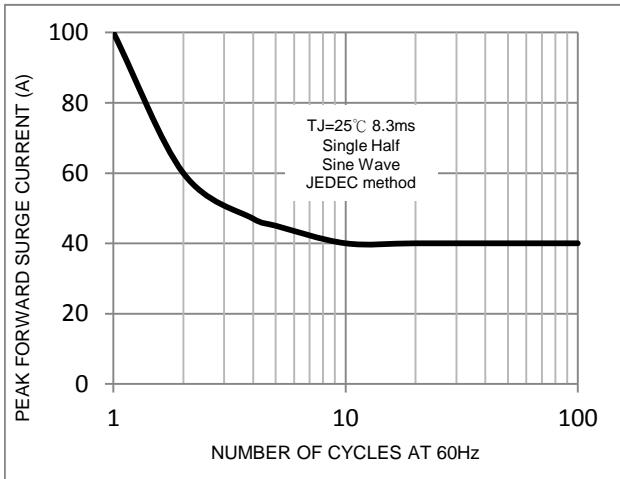


FIG. 4-Typical Reverse Characteristics

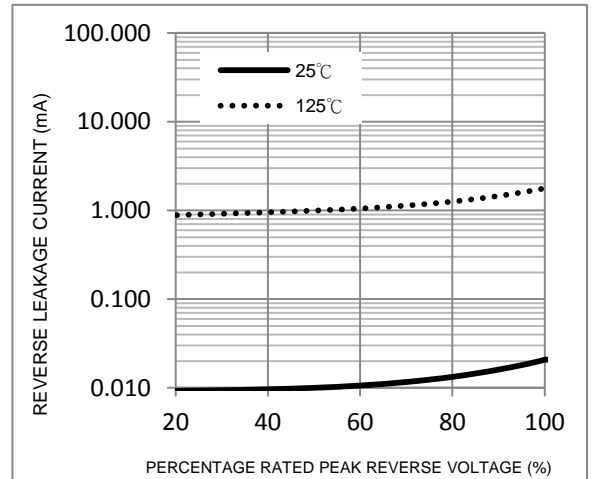
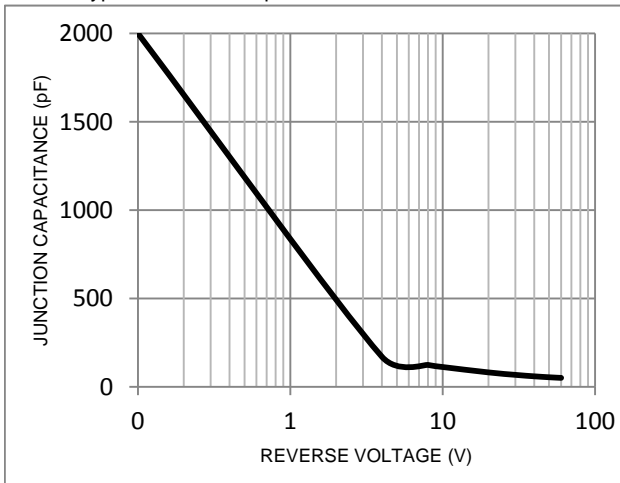
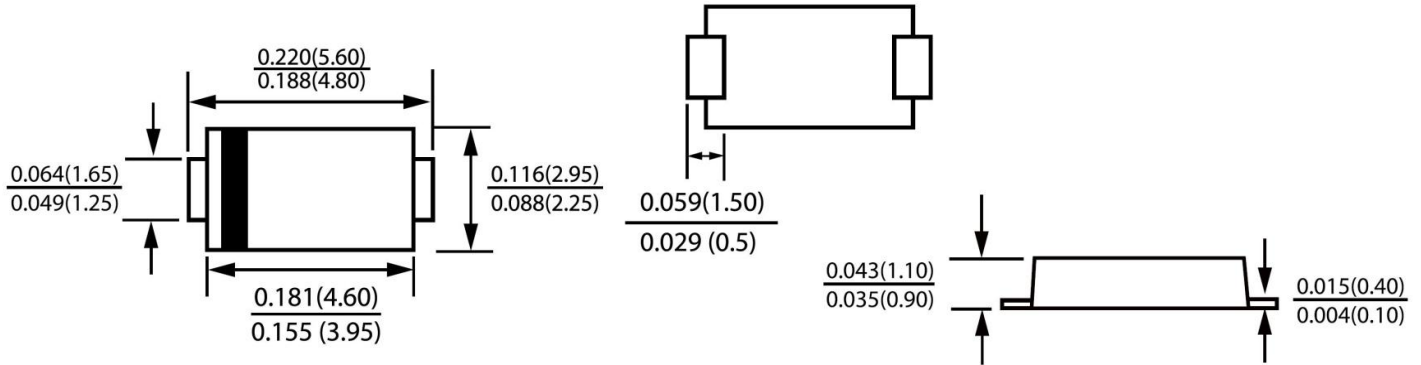


FIG. 5-Typical Junction Capacitance



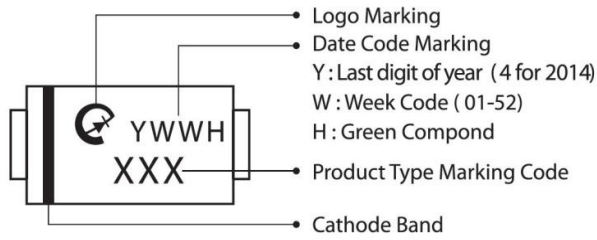
### Package Outline Dimensions



### DO-221AC(SMAF)

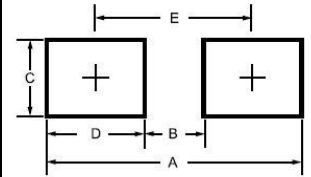
Dimensions in inches and (millimeters)

### 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)

