



# P20L45D



## Excellent Schottky Barrier Rectifiers



DO-201AD

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> </ul>

Device P/N	
Part Number	Remark
P20L45D	General
P20L45D-H	Halogen Free

Primary Characteristics		
$I_F$	20	A
$V_{RRM}$	45	V
$I_{FSM}$	200	A
$V_F$	0.53	V
$T_J$ max	150	°C

Ordering Information		
Part No.	Package	Packing
P20L45D	DO-201AD	500 / Box

Mechanical Data
<ul style="list-style-type: none"> <li>• Cases: DO-201AD</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: 1.071 grams (approximate)</li> </ul>

Maximum Ratings (TA=25°C unless otherwise noted)			
PARAMETER	SYMBOL	P20L45D	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	45	V
Maximum RMS voltage	$V_{RMS}$	31.5	V
Maximum DC blocking voltage	$V_{DC}$	45	V
Maximum average forward rectified current	$I_F$	20.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	200.0	A
Maximum Instantaneous Forward Voltage IF=3A @ 25°C IF=20A @ 25°C	$V_F$	0.34 Typ. 0.53 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	$I_R$	0.5 50	mA
Typical Junction Capacitance(NOTE1)	$C_j$	820	pF
Typical Thermal Resistance	$R_{\theta JC}$	20	°C/W
Operating Temperature Range	$T_J$	-55 to +150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C
Marking Code		20L45D · P20L45D	

NOTES:

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

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### Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

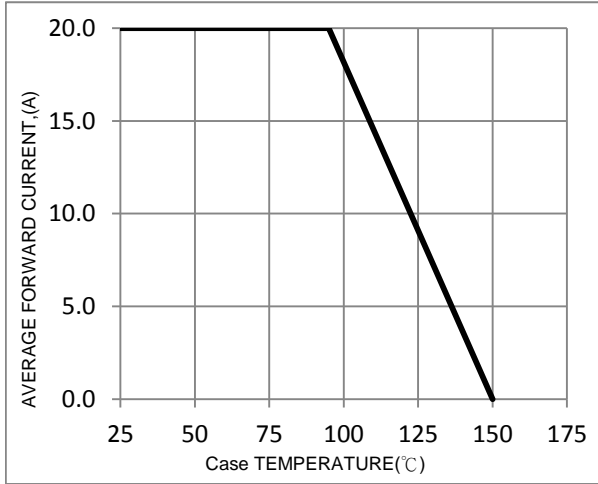


FIG. 2-Typical Forward Characteristics

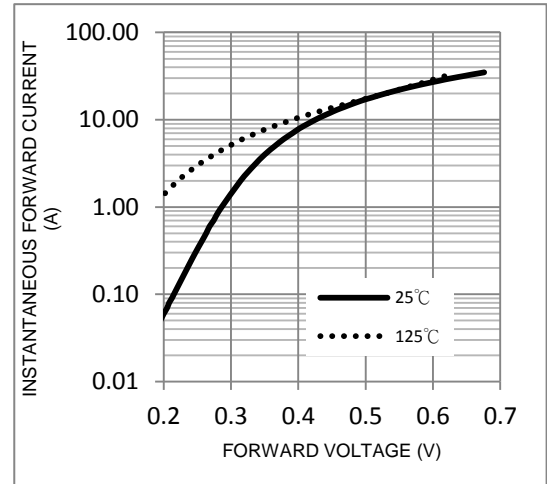


FIG. 3-Maximum Non-Repetitive Forward Surge Current

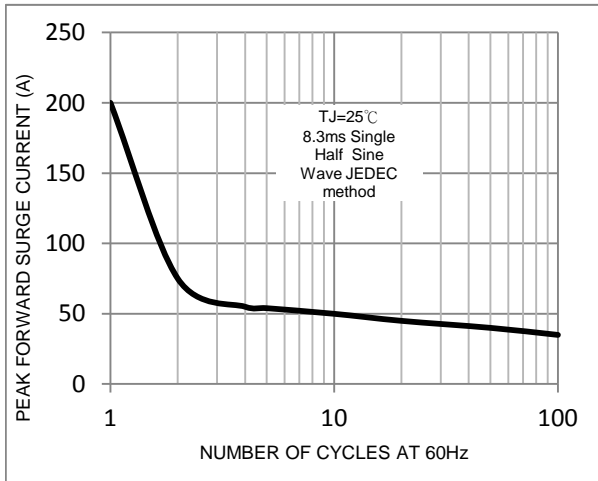


FIG. 4-Typical Reverse Characteristics

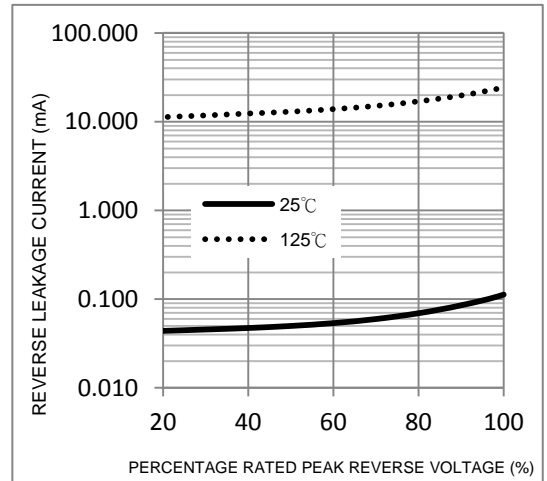
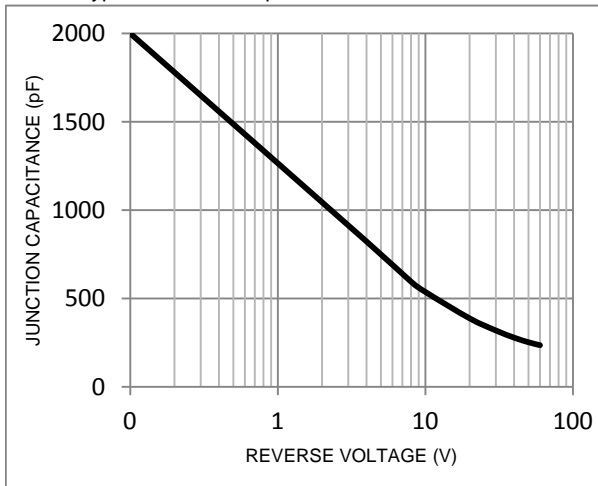
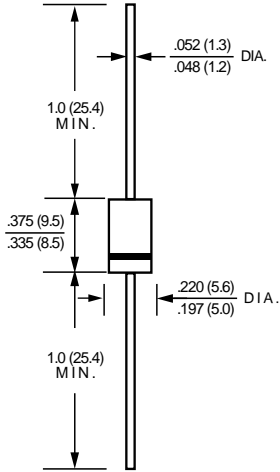


FIG. 5-Typical Junction Capacitance



### Package Outline Dimensions



### DO-201AD

Dimensions in inches and (millimeters)

### Marking Information



### Bulk Packing

Package	Inner Pack	Inner Box (EA)	Inner Box (mm)	Carton (EA)	Carton Size (mm)	Gross Weight (Kg)-Approx.
DO-201AD(DO-27)	Box	500	300x77x39	12000	475x220x260	16