



# T20E120D



## Excellent Schottky Barrier Rectifiers



DO-201AD

### Features

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

### Ordering Information

Part No.	Package	Packing
T20E120D	DO-201AD	500 / Box

### Device P/N

Part Number	Remark
T20E120D	General
T20E120D-H	Halogen Free

### Primary Characteristics

$I_F$	20	A
$V_{RRM}$	120	V
$I_{FSM}$	300	A
$V_F$	0.79	V
$T_J$ max	150	°C

### Mechanical Data

- Cases: DO-201AD
- 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: 1.071 grams (approximate)

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

PARAMETER	SYMBOL	T20E120D	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	120	V
Maximum RMS voltage	$V_{RMS}$	84	V
Maximum DC blocking voltage	$V_{DC}$	120	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	$I_{FSM}$	300.0	A
Maximum Instantaneous Forward Voltage IF=3A @ 25°C IF=20A @ 25°C	$V_F$	0.44 Typ. 0.79 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	$I_R$	0.2 50	mA
Typical Junction Capacitance(NOTE1)	$C_j$	830	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		20E120D · T20E120D	

### 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

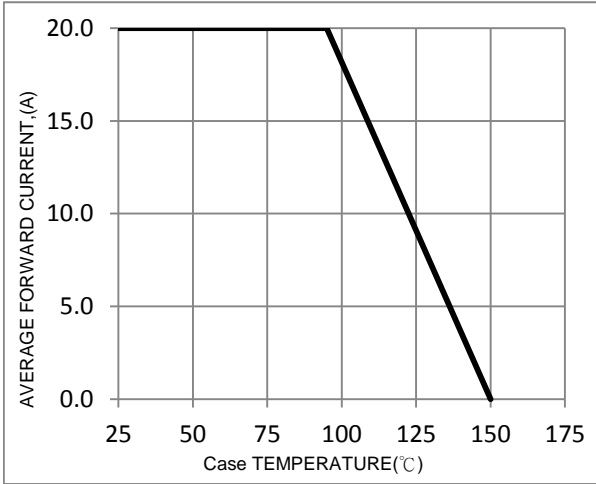


FIG. 2-Typical Forward Characteristics

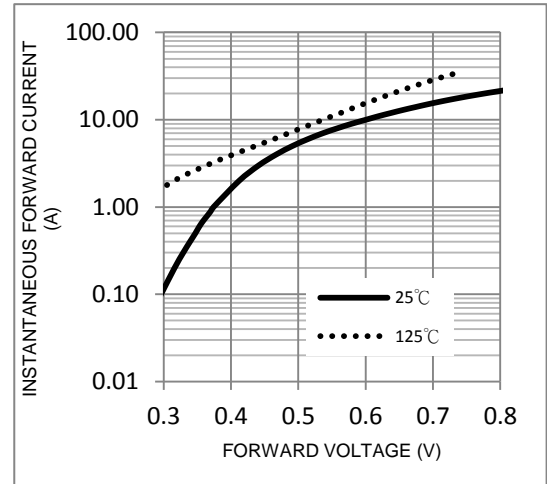


FIG. 3-Maximum Non-Repetitive Forward Surge Current

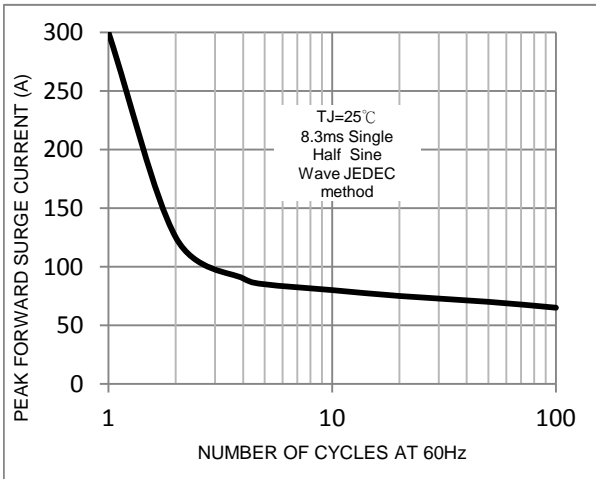


FIG. 4-Typical Reverse Characteristics

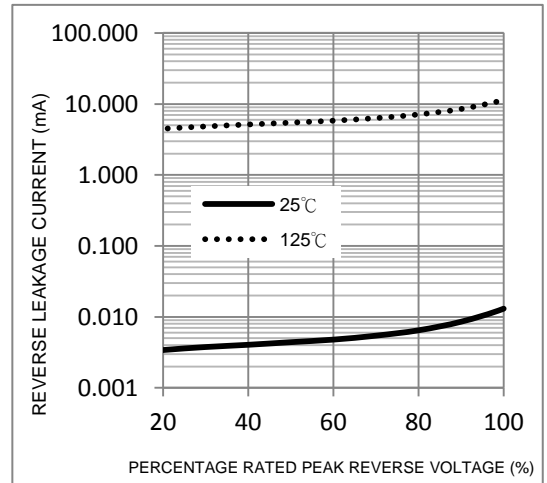
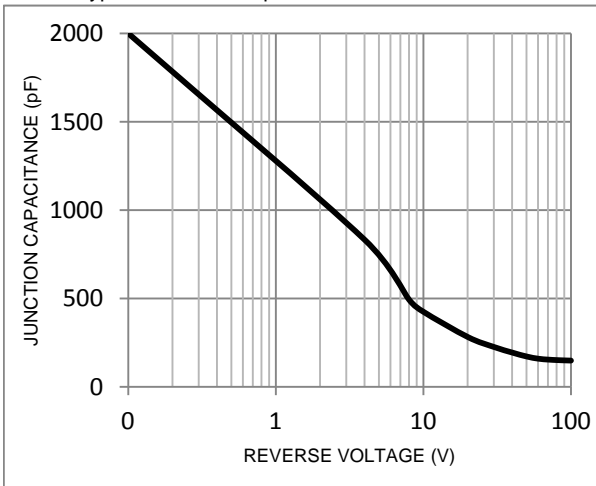
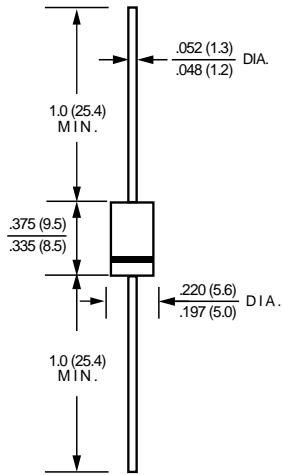


FIG. 5-Typical Junction Capacitance



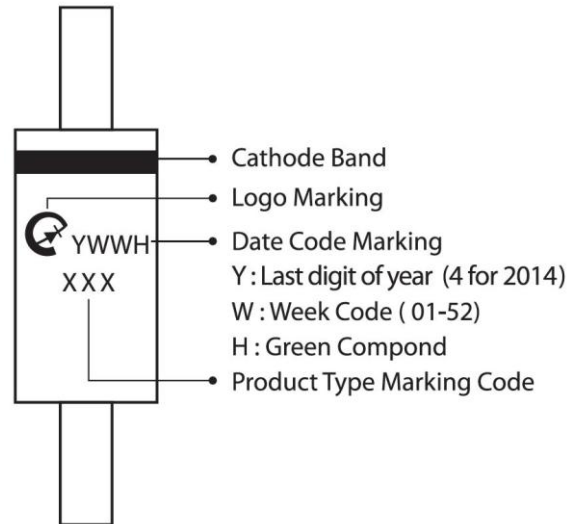
### Package Outline Dimensions



### 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