



P15E45D



Excellent Schottky Barrier Rectifiers



DO-201AD

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

Ordering Information		
Part No.	Package	Packing
P15E45D	DO-201AD	500 / Box

Device P/N	
Part Number	Remark
P15E45D	General
P15E45D-H	Halogen Free

Primary Characteristics		
I_F	20	A
V_{RRM}	45	V
I_{FSM}	150	A
V_F	0.5	V
T_J max	150	°C

Mechanical Data
<ul style="list-style-type: none"> • 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	P15E45D	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	15.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0	A
Maximum Instantaneous Forward Voltage IF=3A @ 25°C IF=15A @ 25°C	V_F	0.34 Typ. 0.50 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		15E45D · P15E45D	

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

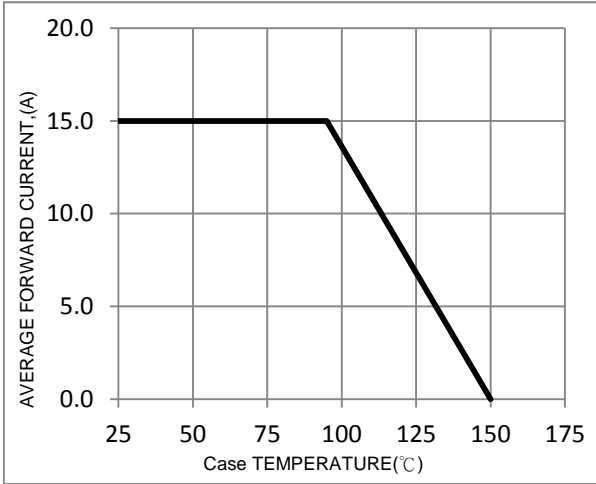


FIG. 2-Typical Forward Characteristics

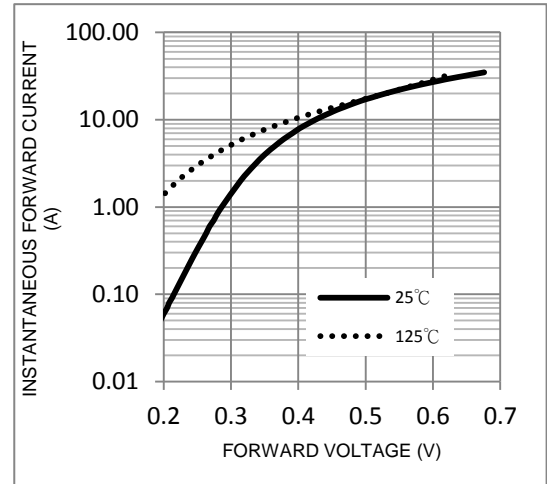


FIG. 3-Maximum Non-Repetitive Forward Surge Current

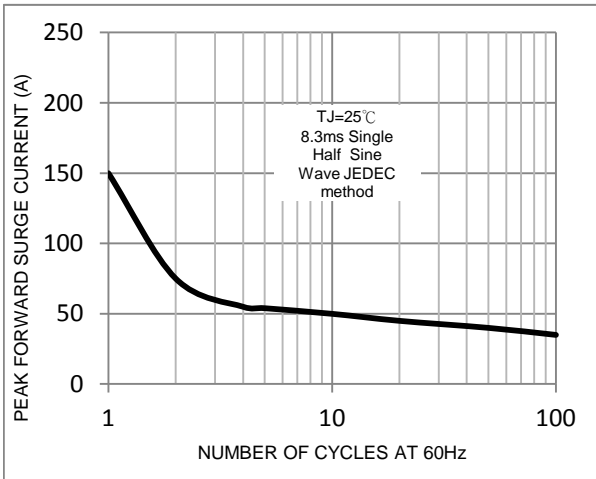


FIG. 4-Typical Reverse Characteristics

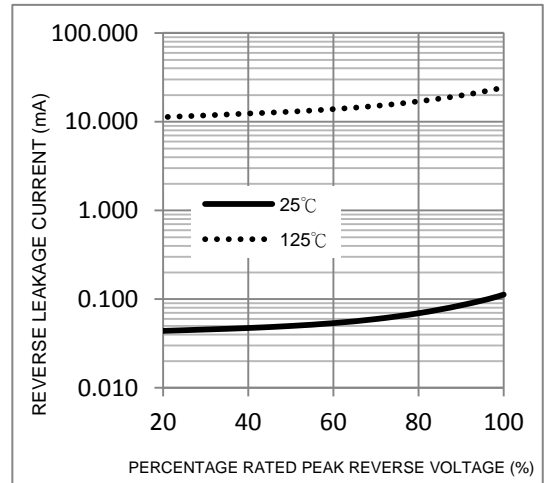
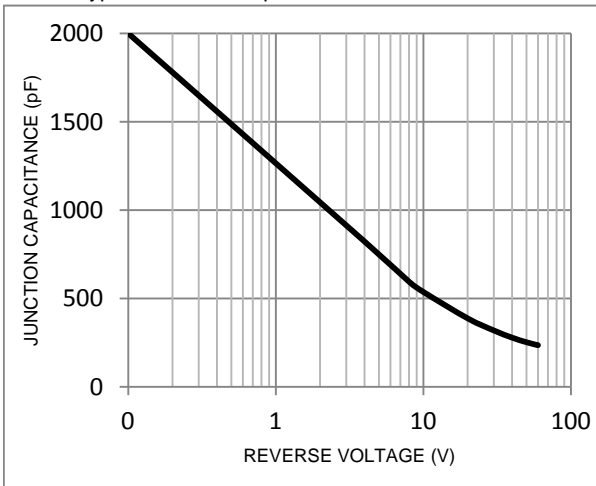
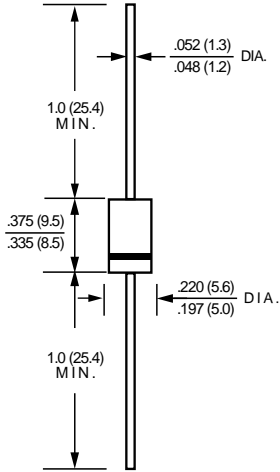


FIG. 5-Typical Junction Capacitance



Package Outline Dimensions



DO-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