



P10X300CT



Excellent Schottky Barrier Rectifiers



TO-220AB

Primary Characteristics		
I_F	20	A
V_{RRM}	300	V
I_{FSM}	150	A
V_F	0.83	V
T_J max	150	°C

Features
<ul style="list-style-type: none"> • Low Forward Voltage Drop • Excellent High Temperature Stability • Excellent Barrier Rectifier Technology • Soft, Fast Switching Capability

Mechanical Data
<ul style="list-style-type: none"> • Case: TO-220AB • Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0 • Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208 • Weight: 2.015 grams (approximate)

Ordering Information			
Part No.	Remark	Package	Packing
P10X300CT	General	TO-220AB	50 & 2000 / Tube & Box
P10X300CT-H	Halogen Free		

Maximum Ratings (TA=25°C unless otherwise noted)			
PARAMETER	SYMBOL	P10X300CT	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 (Total) (Per Leg)	I_F	10 5	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage $I_F=3A @ 25°C$ $I_F=5A @ 25°C$	V_F	0.74 Typ. 0.83 Max.	V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	I_R	0.2 5	mA
Typical Junction Capacitance(NOTE1)	C_j	130	pF
Typical Thermal Resistance	$R_{\theta JC}$	3	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C
Marking Code		P10X300CT · 10X300CT	

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

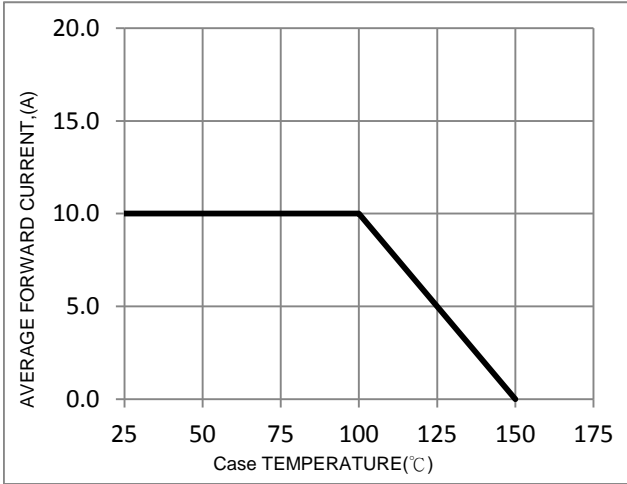


FIG. 2-Typical Forward Characteristics

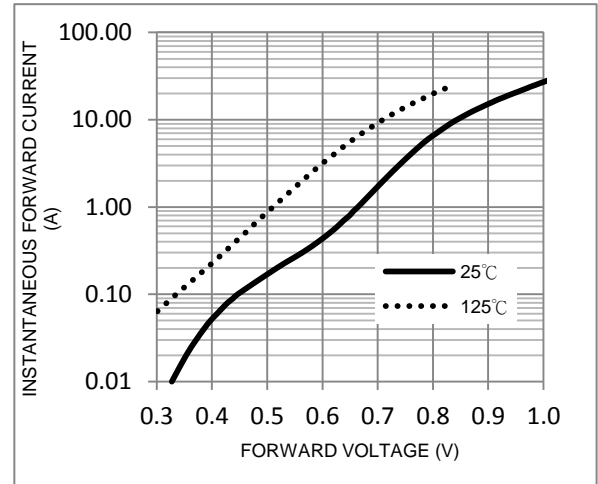


FIG. 3-Maximum Non-Repetitive Forward Surge Current

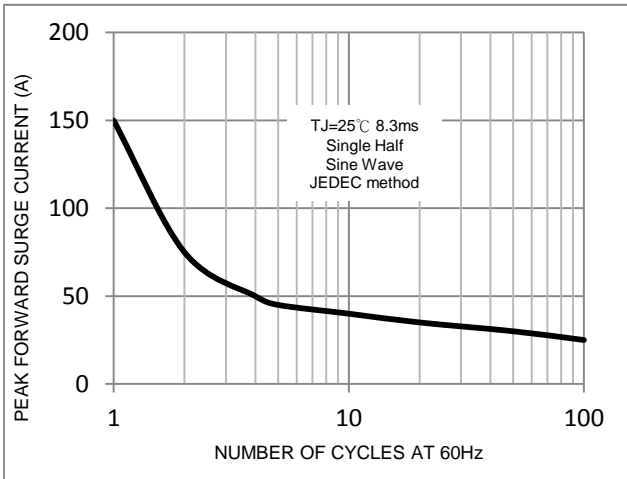


FIG. 4-Typical Reverse Characteristics

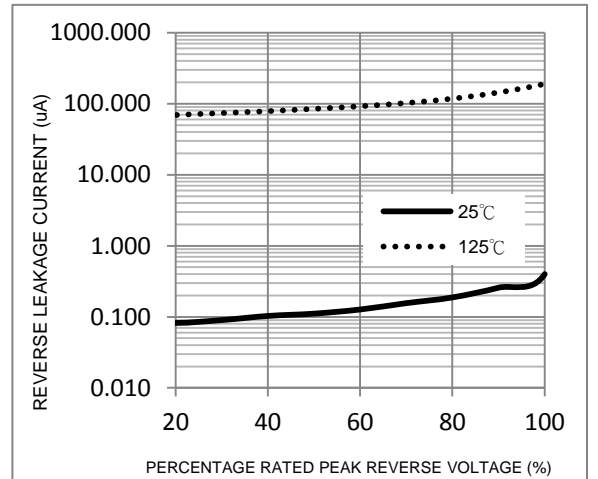
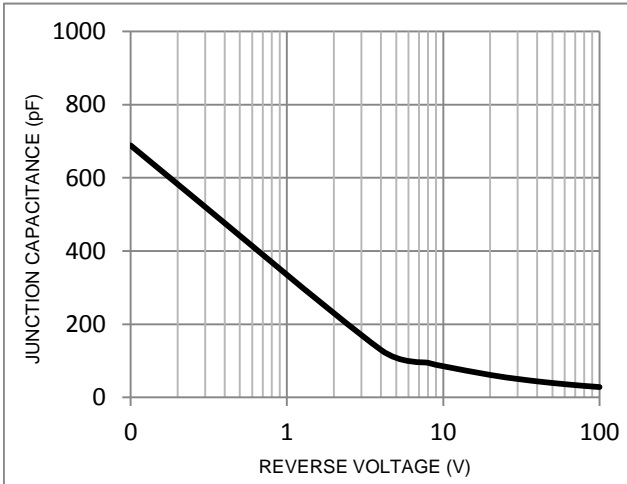
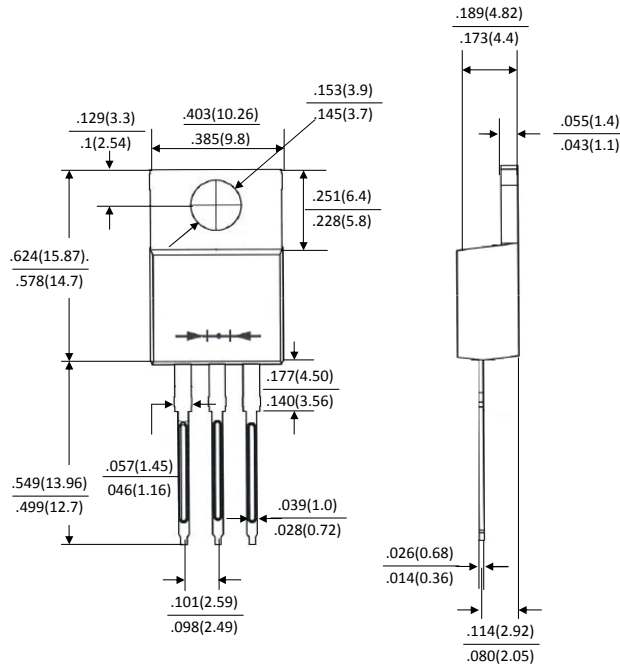


FIG. 5-Typical Junction Capacitance



Package Outline Dimensions



TO-220AB

Dimensions in inches and (millimeters)

Marking Information

