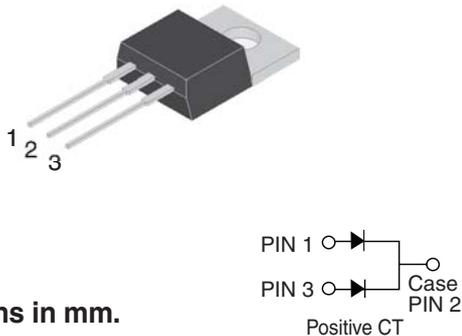


16.0 Amp. Glass Passivated Rectifiers

<p>TO-220AB</p>  <p>Dimensions in mm.</p>	<p>Voltage 50 to 1000 V</p>	<p>Current 16.0 A</p>
	<ul style="list-style-type: none"> • Low forward Voltage drop • High current capability • High reliability • High surge current capability 	
	<p>Mechanical Data</p> <ul style="list-style-type: none"> • Cases: Molded plastic • Epoxy: UL 94V-O rate flame retardant • Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed • Polarity: As marked • High temperature soldering guaranteed: 260 °C/10 seconds 4.06mm., from case. • Weight: 2.24 grams 	

Absolute Maximum Ratings, according to IEC publication No. 134

		GP1603	GP1604	GP1605	GP1606	GP1607
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Maximum Average Forward Rectified Current 9.5mm Lead Length at $T_C = 100\text{ °C}$	16.0 A				
I_{FSM}	Peak Forward Surge Current 8.3 ms. single Half Sine-wave Superimposed on Rated Load (Jedec Method)	150 A				
C_j	Typical Junction Capacitance at 1MHz and reverse voltage of $4V_{DC}$	50 pF				
T_j, T_{stg}	Operating and Storage temperature range	- 65 to + 150 °C				

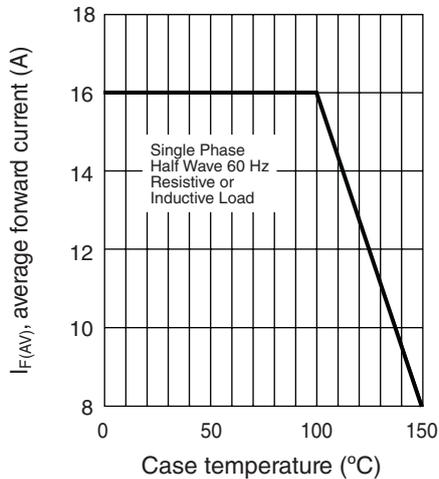
Electrical Characteristics

		GP1603	GP1604	GP1605	GP1606	GP1607
V_F	Max. Instantaneous Forward Voltage @ 8.0 A	1.1 V				
I_R	Maximum DC Reverse Current @ $T_C = 25\text{ °C}$ at Rated DC Blocking Voltage @ $T_C = 125\text{ °C}$	10 μ A 250 μ A				
R_{thj-C}	Typical Thermal Resistance (Note 1)	1.5 °C/W				

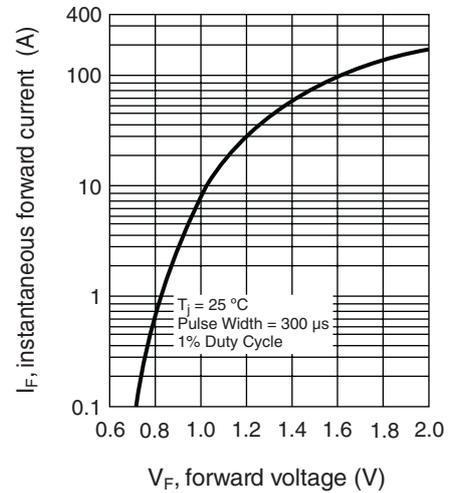
Note: 1. Thermal Resistance from Junction to Case Mounted on Heatsink size 50.8 mm x 76.2 mm x 6.35 mm Al-Plate.

Rating And Characteristic Curves

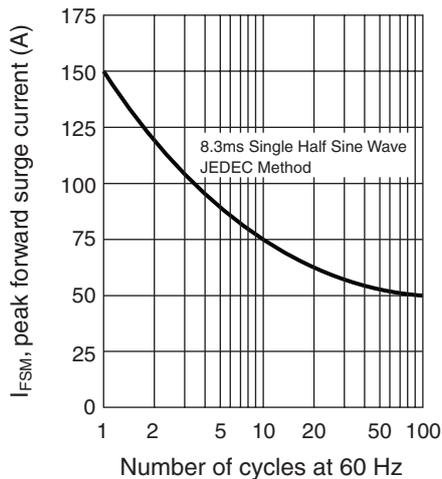
MAXIMUM FORWARD CURRENT DERATING CURVE



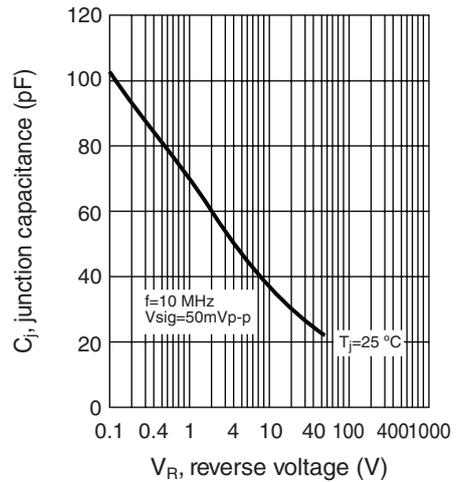
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG



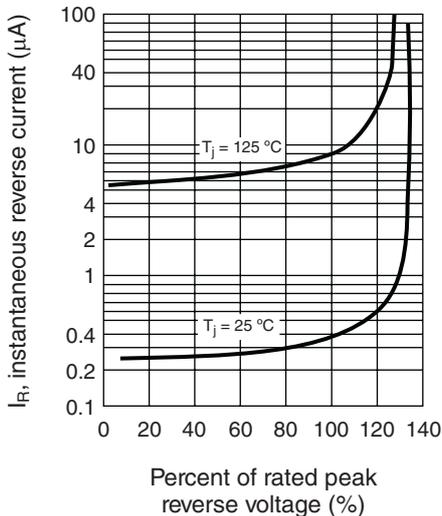
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG



TYPICAL JUNCTION CAPACITANCE PER LEG



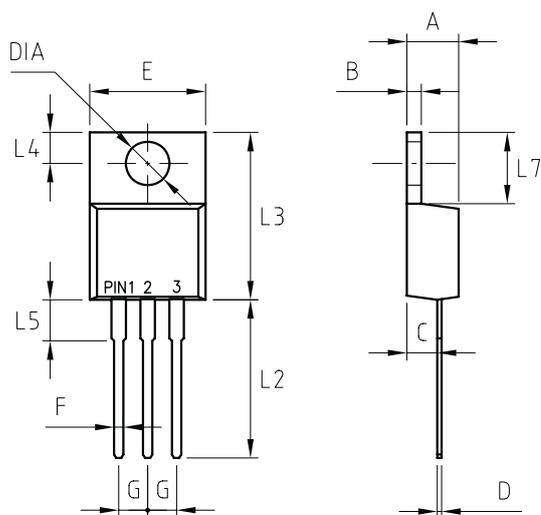
TYPICAL REVERSE CHARACTERISTICS PER LEG



16.0 Amp. Glass Passivated Rectifiers

PACKAGE MECHANICAL DATA

TO-220AB



REF.	DIMENSIONS	
	Milimeters	
	Min.	Max.
A	4.44	4.70
B	1.14	1.40
C	2.54	2.79
D	0.35	0.64
E	--	10.5
F	0.68	0.94
G	2.41	2.67
L2	13.46	14.22
L3	14.90	15.10
L4	2.62	2.87
L5	3.56	4.06
L7	5.84	6.86
DIA	3.91	3.74