

## 10 Amp Silicon Rectifiers

### Features

- Low forward voltage drop
- high current capability
- High forward surge current capability
- High reliability
- High temperature soldering guaranteed 260°C/10 seconds  
/.375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS compliant



T6L



### Mechanical Data

<b>Case:</b>	T6L, molded plastic
<b>Epoxy:</b>	Meets UL 94V-0 flammability rating
<b>Terminals:</b>	Axial leads, solderable per MIL-STD-202G, Method 208
<b>Polarity:</b>	Cathode indicated by color band
<b>Weight:</b>	0.07 Ounce, 2.1 gram

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	T10A 05L	T10A 10L	T10A 20L	T10A 40L	T10A 60L	T10A 80L	T10A 100L	Unit	Conditions
<b>VRRM</b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>VRMS</b>	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
<b>VDC</b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>IF(AV)</b>	Maximum Average Forward Rectified Current	10							A	<b>Note 1</b>
<b>IFSM</b>	Peak Forward Surge Current	600							A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)
<b>TJ,TSTG</b>	Operating Junction and Storage Temperature Range	-55 to +125							°C	

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## T10A05L~ T10A100L

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	T10A 05L	T10A 10L	T10A 20L	T10A 40L	T10A 60L	T10A 80L	T10A 100L	Unit	Conditions
$V_F$	Maximum Forward Voltage	1.0							V	IF at 10 A
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							$\mu A$	$T_A=25^{\circ}C$
		400								$T_A=100^{\circ}C$
$C_J$	Typical Junction Capacitance	100							pf	$V_R=4V, f=1MHz$
$R_{\theta-JA}$	Maximum Thermal Resistance	10							$^{\circ}C/W$	<b>Note 2</b>

- Note:** 1. 60Hz, resistive or inductive load. Derate current by 20% for capacitive load  
 2. Thermal resistance from junction to ambient at .375" (9.5mm) lead length.

### Typical Characteristics Curves

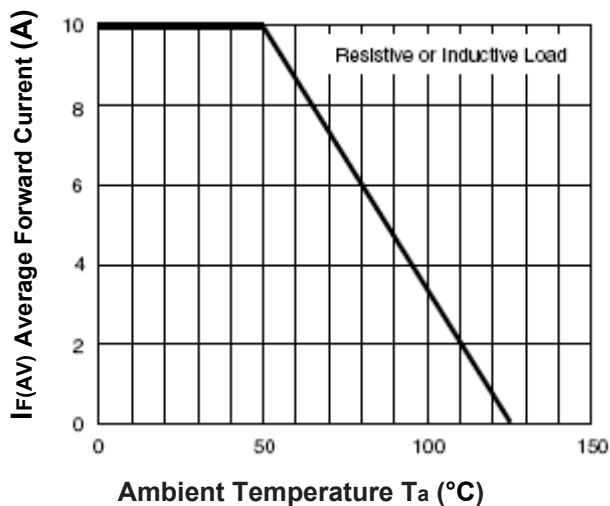


Fig.1- Forward Current Derating Curve

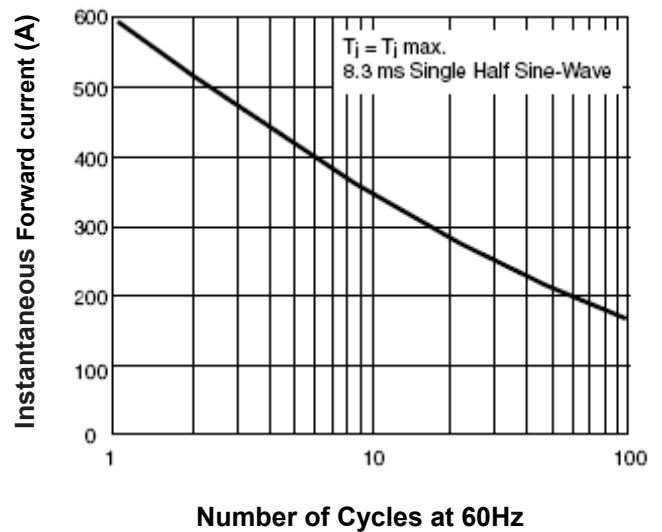


Fig.2- Max. Non-Repetitive Forward Surge Current

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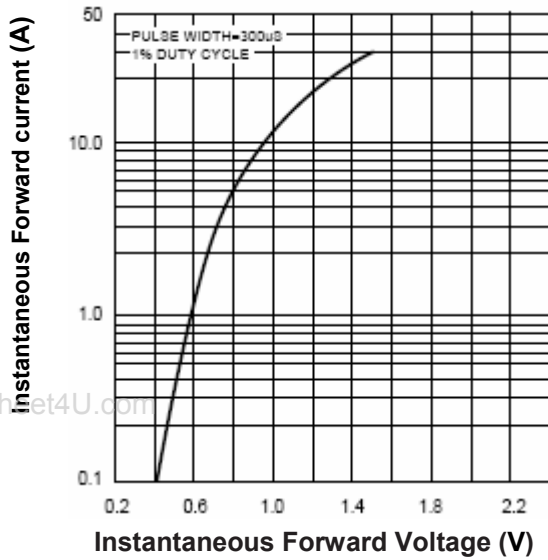


Fig.3-Typical Instantaneous Forward Characteristics

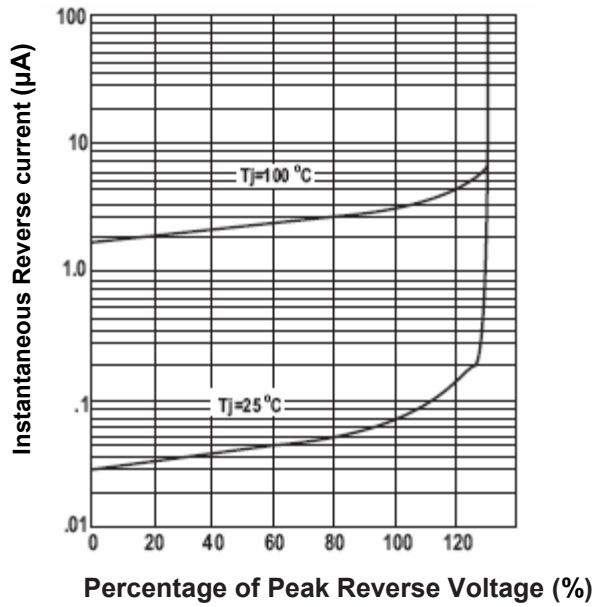
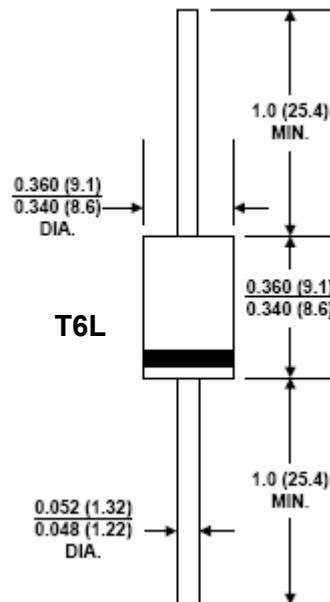


Fig.4- Typical Reverse Characteristics

### Dimensions in inches (mm)



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## T10A05L~ T10A100L

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