

## 6.0 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	T6A 05L	T6A 10L	T6A 20L	T6A 40L	T6A 60L	T6A 80L	T6A 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	6.0							A	<b>Note 1</b>
<b>IFSM</b>	Peak Forward Surge Current	400							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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## T6A05L~ T6A100L

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

Symbol	Description	T6A 05L	T6A 10L	T6A 20L	T6A 40L	T6A 60L	T6A 80L	T6A 100L	Unit	Conditions
$V_F$	Maximum Forward Voltage	0.95							V	$I_F$ at 6.0 A
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							$\mu\text{A}$	$T_A=25^{\circ}\text{C}$
		400								$T_A=100^{\circ}\text{C}$
$C_J$	Typical Junction Capacitance	100							pf	$V_R=4\text{V}$ , $f=1\text{MHz}$
$R_{\theta\text{-JA}}$	Maximum Thermal Resistance	10							$^{\circ}\text{C/W}$	<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

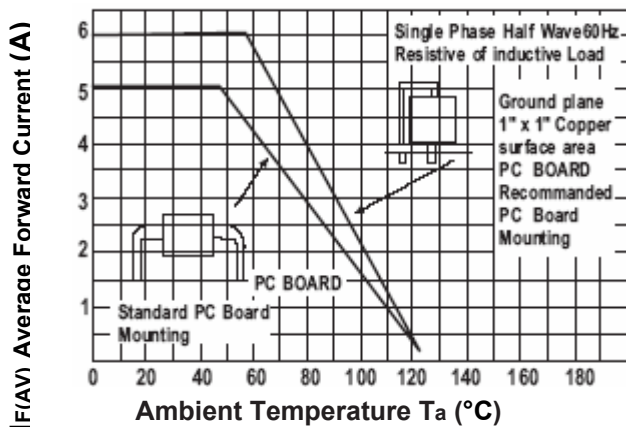


Fig.1- Forward Current Derating Curve

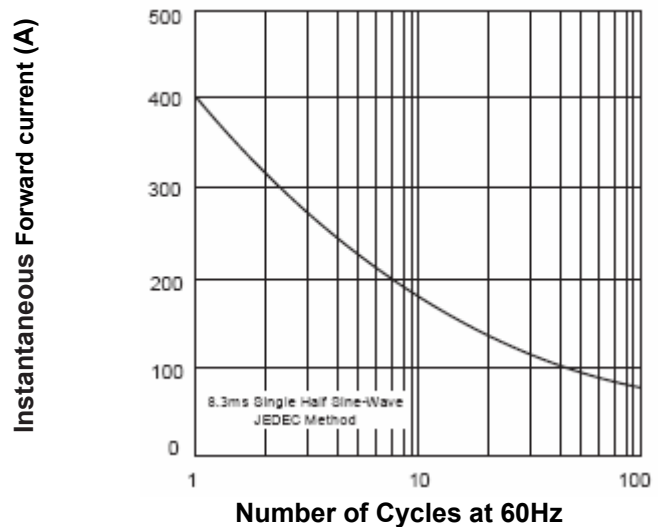


Fig.2- Max. Non-Repetitive Forward Surge Current

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## T6A05L~ T6A100L

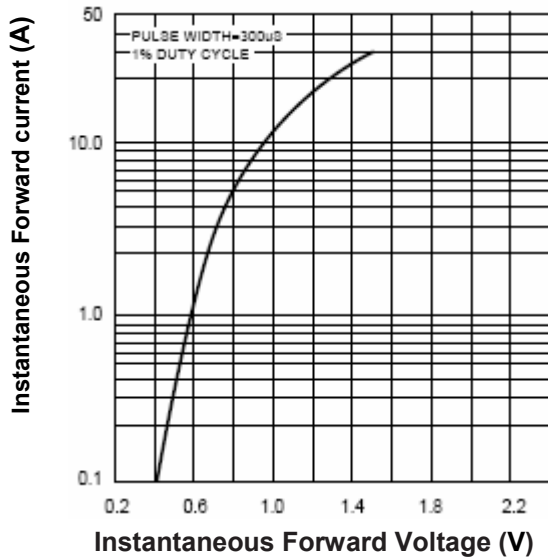
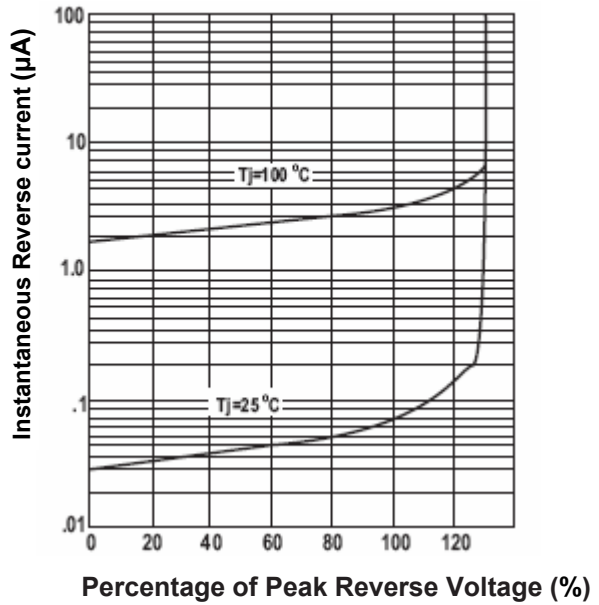
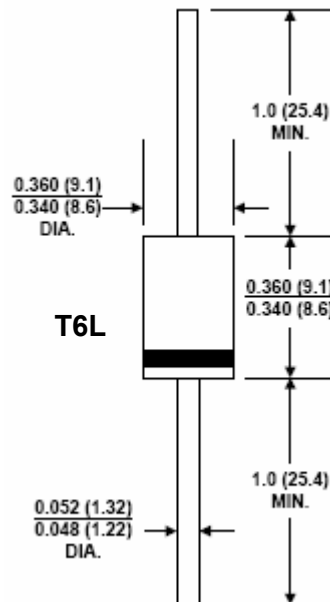


Fig.3-Typical Instantaneous Forward Characteristics



### Dimensions in inches (mm)

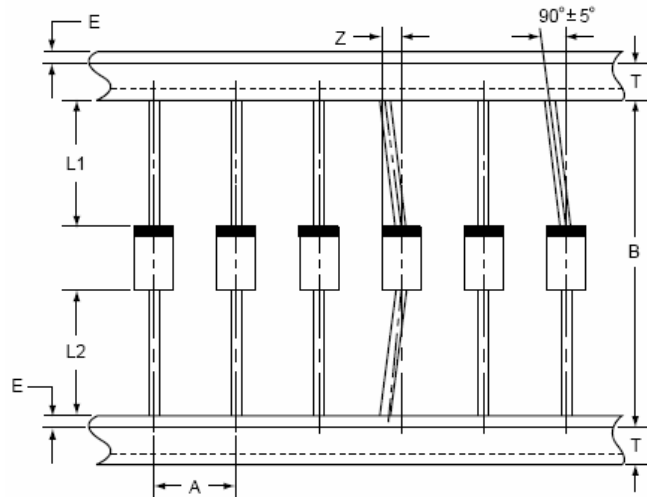


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## T6A05L~ T6A100L

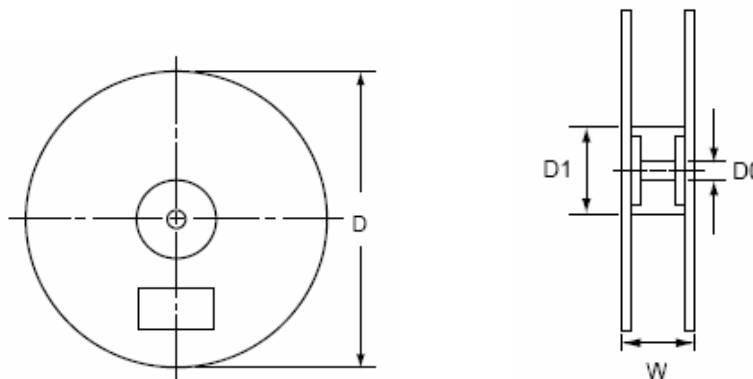
### Packing Information:

**Carrier Tape Dimensions** (in mm) Loaded quantity 750 PCS per reel



Components Outline	A	B	L1- L2	T	E	Z
T6L	10±0.5	52.4±1	Max.1.0	6±0.4	Max.0.8	Max.1.2

### Reel Dimensions (in mm)



D	D0	D1	W
330.0±2.0	16.6±0.4	85.7±0.3	79.0±1.0

### Carton Information

PCS per Carton	Carton Size
3000	340X340X330 ( in mm)

### How to contact us:

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