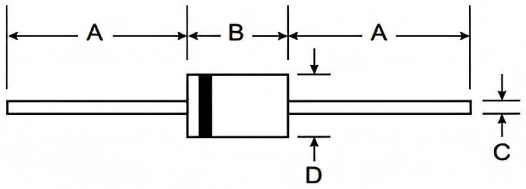
General Purpose Rectifier

Parameter	Value	Unit
V_{RRM}	50~1000	V
$I_{F(AV)}$	1.5	A

DO-15



DO-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.6	0.8
D	2.60	3.60
All Dimensions in mm		

Features

- Low coat construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability

Applications

- For use in general purpose rectification in power supplies, inverters, converters, and as freewheeling diodes for consumer and telecommunications applications.

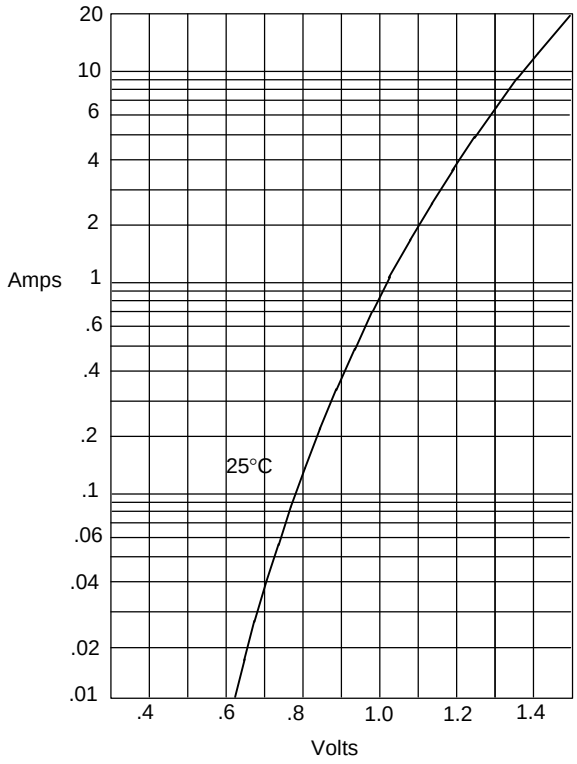
Maximum Rated Values (at T_J = 25℃, unless otherwise specified)

Parameter		Symbol	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length at T_A= 70℃		$I_{F(AV)}$	1.5									A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)		I_{FSM}	50									A
Maximum Instantaneous Forward Voltage at 1.5A		V_F	1.1									V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	T_A=25℃	I_R	5.0									μA
	T_A=100℃		50									
Maximum Full Load Reverse Current, full cycle average 0.375"(9.5mm)lead length at T_A=75℃		$I_{R(AV)}$	30									μA
Typical Junction Capacitance Measured at 1.0MHz, V_R=4.0V		C_J	20									pF
Typical Thermal Resistance		$R_{\theta JA}$	26									℃/W
Operating Junction Temperature Range		T_J	-55 to +150									℃
Storage Temperature Range		T_{STG}	-55 to +150									℃

Note:1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

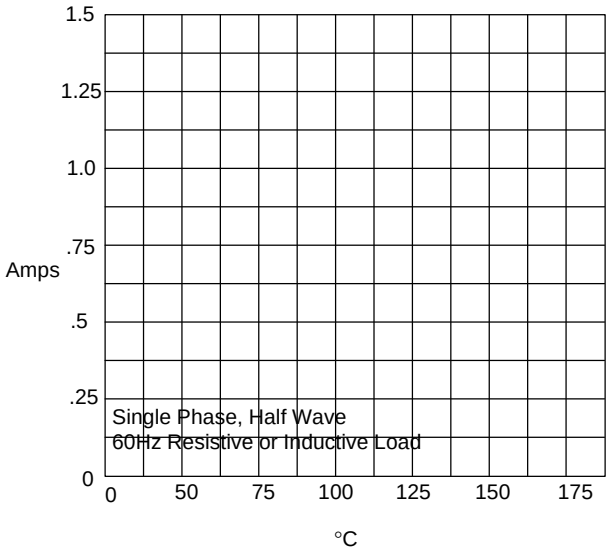
Typical Characteristics

Figure 1 Typical Forward Characteristics



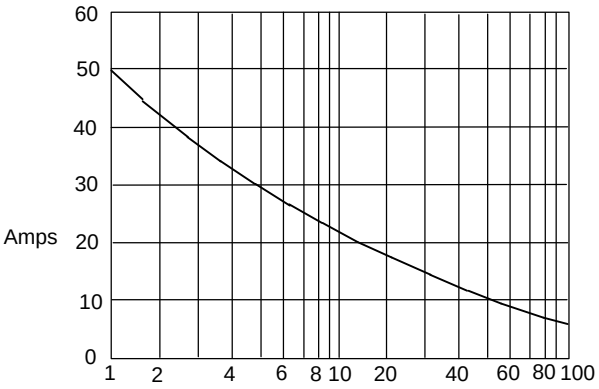
Instantaneous Forward Current - Amperes*versus*
Instantaneous Forward Voltage - Volts

Figure 2 Forward Derating Curve



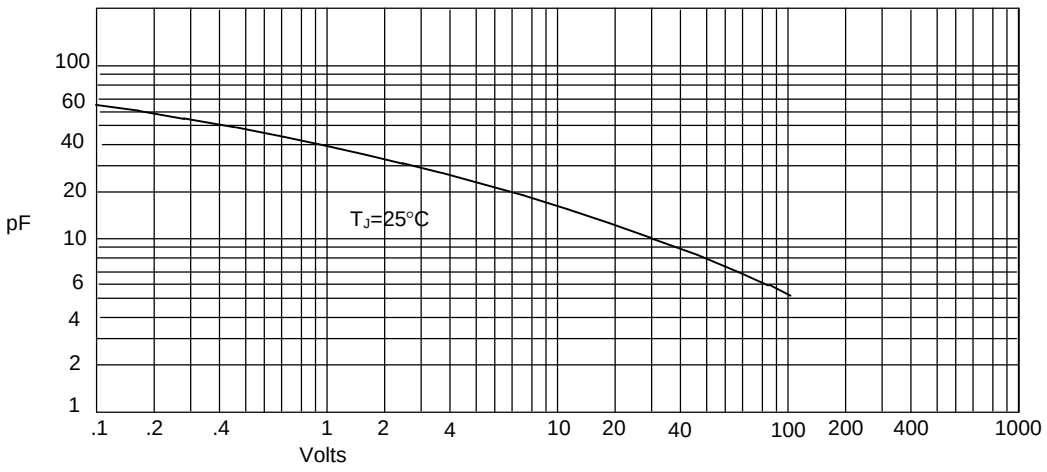
Average Forward Rectified Current - Amperes*versus*
Ambient Temperature -°C

Figure 3 Peak Forward Surge Current



Peak Forward Surge Current - Amperes*versus*
Number Of Cycles At 60Hz - Cycles

Figure 4 Junction Capacitance



Junction Capacitance - pF*versus*
Reverse Voltage - Volts

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