

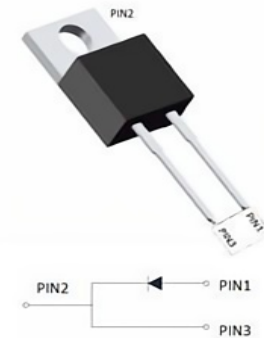
High Voltage Rectifier Diode

Feature

- 150°C operating junction temperature
- High capacity to withstand positive surge currents
- Low IR value
- High surge current capability

Applications

- Switch power supply
- Antiparallel Diode for high frequency switching devices



TO-220AC-2L

Absolute Maximum Ratings (@Tc = 25°C)

Symbol	Parameter	Conditions	Ratings	Unit
V_R	D.C Reverse Voltage		2200	V
V_{RRM}	Repetitive Peak Reverse Voltage		2200	V
$I_{F(AV)}$	Average Forward Current	$T_c = 110^\circ\text{C}$	30	A
I_{FSM}	Surge(non-repetitive) Forward Current	$T_J = 25^\circ\text{C}$, $t = 8.3\text{ms}$, 60Hz, Sine	300	A
T_J	Junction Temperature		150	$^\circ\text{C}$
T_{stg}	Storage Temperature		-55~150	

Electrical Characteristics @Tc = 25°C (unless otherwise specified)

Symbol	Parameter	Conditions	Min.	Type	Max.	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	$I_R = 100\mu\text{A}$	2200	-	-	V
I_{RM}	Reverse Leakage Current	$V_R = 2200\text{V}$, $T_J = 25^\circ\text{C}$	-	-	30	μA
		$V_R = 2200\text{V}$, $T_J = 150^\circ\text{C}$	-	-	3000	μA
V_F	Forward Voltage	$I_F = 30\text{A}$, $T_J = 25^\circ\text{C}$	-	1.2	1.3	V

Thermal Characteristics

Symbol	Parameter	Conditions	Value			Unit
			Min.	Type	Max.	
$R_{th(j-c)}$	Thermal Resistance	Junction to Case	-	-	1.0	$^\circ\text{C/W}$

Ordering Information

Package	Outling	Tube(pcs)	Inner Box (pcs)	Per Caeton
TO-220AC-2L	Tube	50	100	5000

Electrical characteristics

Fig.1- Typical forward characteristics

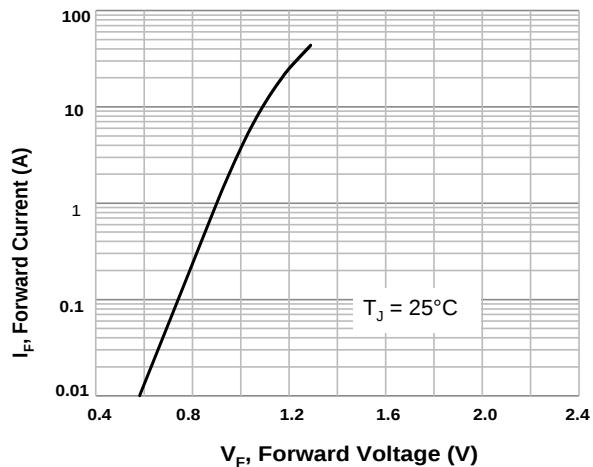


Fig.2-Typical reverse characteristics

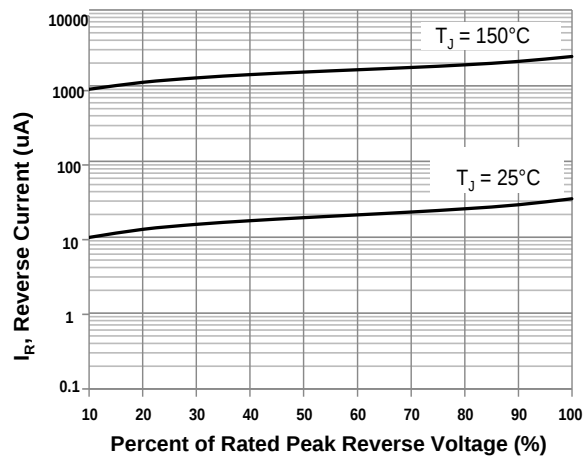


Fig.3-Maximum non-repetitive peak forward surge current

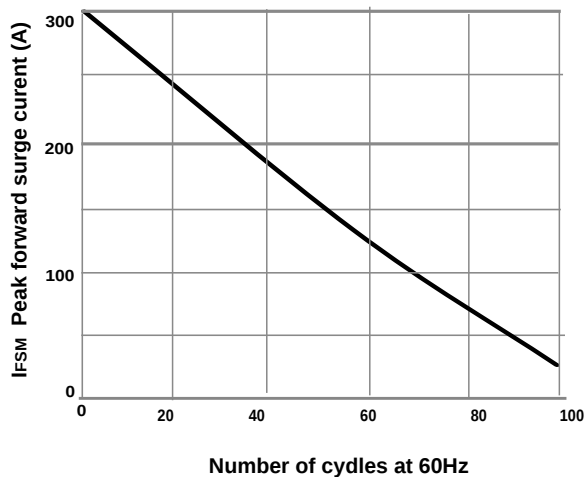
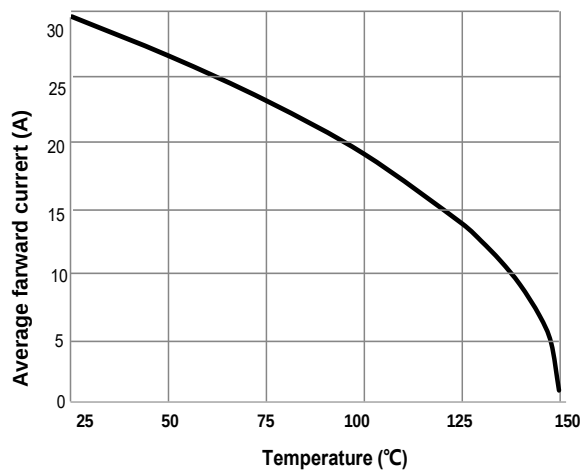
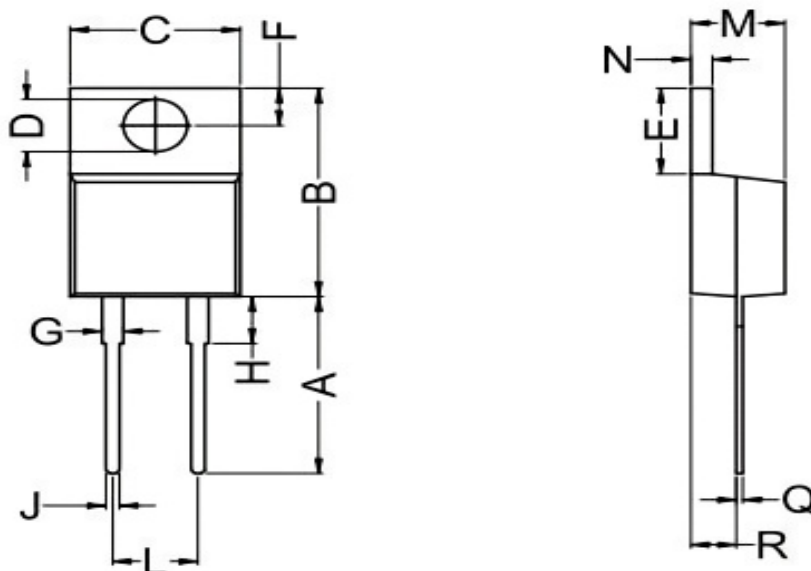


Fig.4-Forward current derating curve



Package outline dimension



Dim.	Millimeter	
	Min.	Max.
A	12.70	13.97
B	14.73	16.00
C	9.91	10.66
ØD	3.54	4.08
E	5.85	6.85
F	2.54	3.18
G	1.15	1.65
H	2.79	5.84
J	0.64	1.01
L	5.05BSC	
M	4.32	4.82
N	1.14	1.39
Q	0.35	0.56
R	2.29	2.79