



V_{RSM} V	V_{RRM} V	$I_{FRMS} = 11800$ A (maximum value for continuous operation) $I_{FAV} = 7500$ A (sin. 180; $T_C = 85^\circ\text{C}$)		
600	600	ADWN 7500-06		

Symbols and parameters			Values	Units
I_{FAV}	Mean forward current	sin 180; $T_C = 85$ (100) $^\circ\text{C}$	7500 (6700)	A
I_{FSM}	Surge forward current	$T_{vj} = 25^\circ\text{C}; 10$ ms $T_{vj} = 180^\circ\text{C}; 10$ ms	60 50	kA kA
i^2t	i^2t value, rating for fusing	$T_{vj} = 25^\circ\text{C}; 8.3...10$ ms $T_{vj} = 180^\circ\text{C}; 8.3...10$ ms	18000 12500	kA^2s kA^2s
V_F	Forward voltage	$T_{vj} = 25^\circ\text{C}; I_F = 14$ kA	max. 1.3	V
$V_{F(TO)}$	On-state threshold voltage	$T_{vj} = 180^\circ\text{C}$	max. 0.7	V
r_T	On-state slope resistance	$T_{vj} = 180^\circ\text{C}$	max. 0.038	$\text{m}\Omega$
I_{RD}	Direct reverse current	$T_{vj} = 25^\circ\text{C}; V_{RD} = V_{RRM}$ $T_{vj} = 180^\circ\text{C}; V_{RD} = V_{RRM}$	max. 4 max. 100	mA
$R_{th(j-c)}$	Thermal resistance, junction to case	DSC SSC anode / SSC cathode	9 12.4 / 33	K/kW K/kW
$R_{th(c-s)}$	Thermal resistance, junction to heatsink	DSC / SSC	5 / 10	K/kW
T_{vj}	(Virtual) junction temperature		-40 ... +180	$^\circ\text{C}$
T_{stg}	Storage temperature range		-40 ... +180	$^\circ\text{C}$
F	Mounting force		24...30	kN
a	Maximum allowable acceleration		5*9.81	m/s^2
W	Weight		78	g

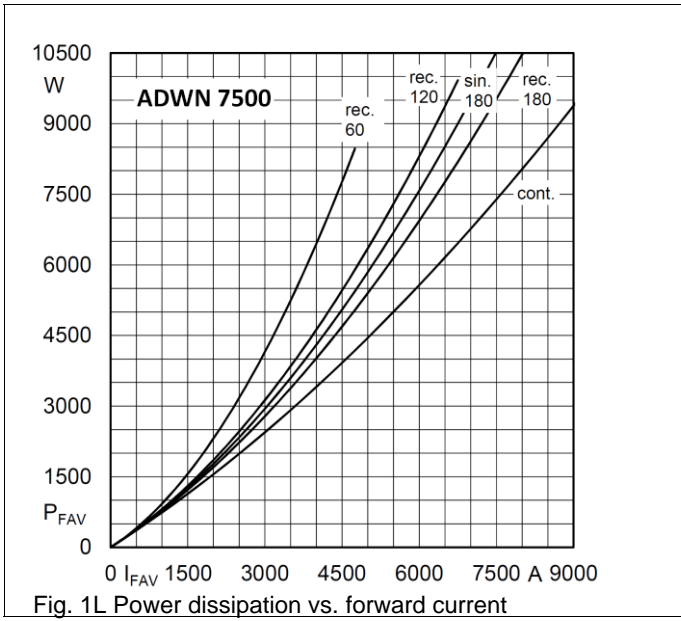


Fig. 1L Power dissipation vs. forward current

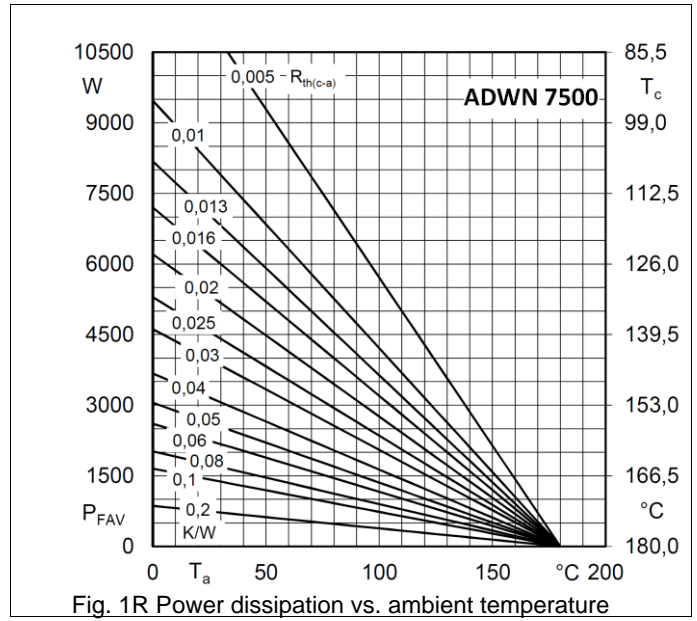


Fig. 1R Power dissipation vs. ambient temperature

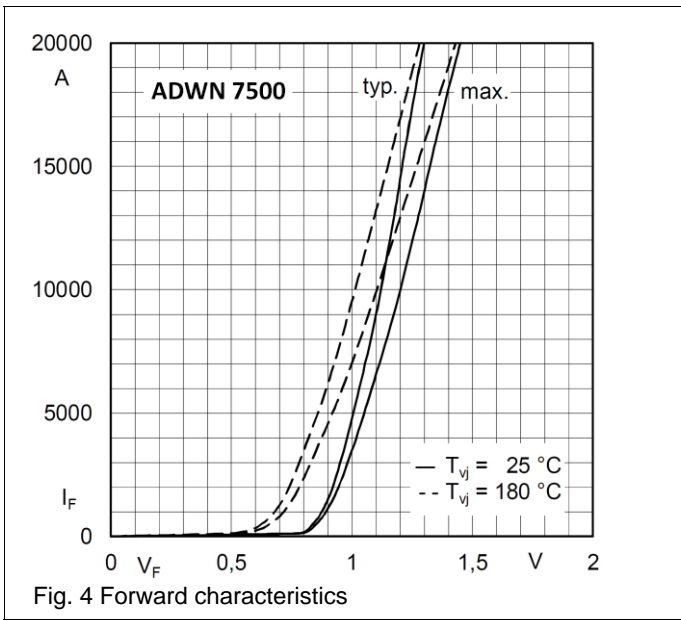


Fig. 4 Forward characteristics

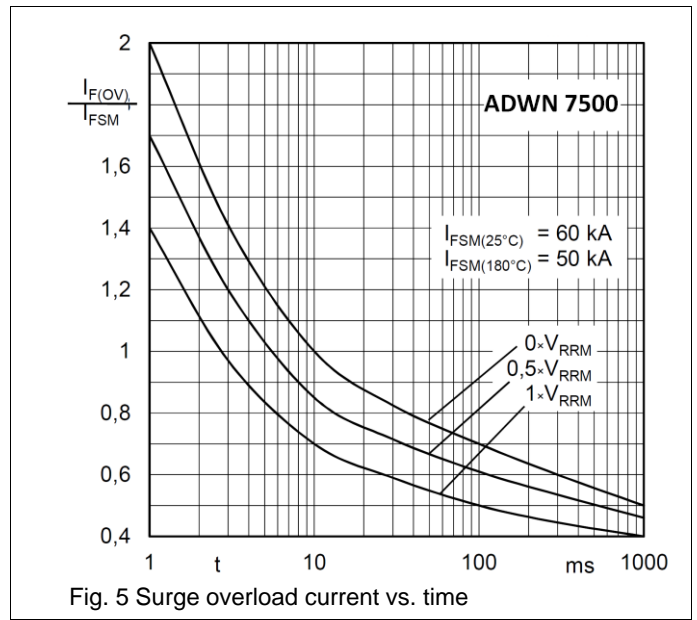


Fig. 5 Surge overload current vs. time

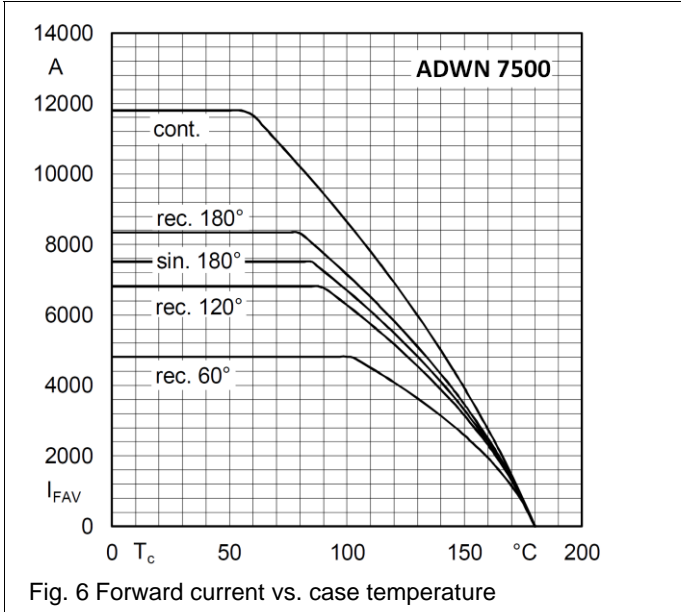
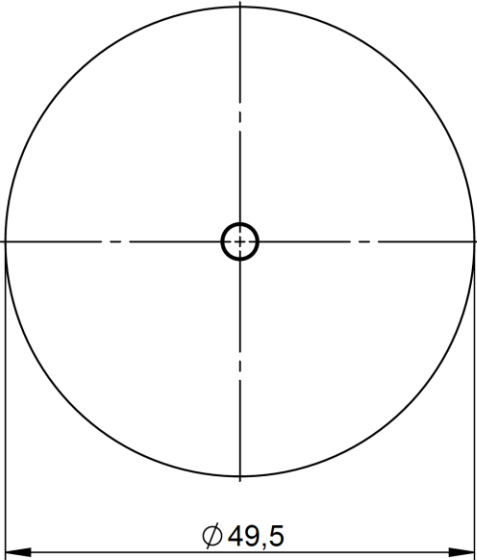


Fig. 6 Forward current vs. case temperature

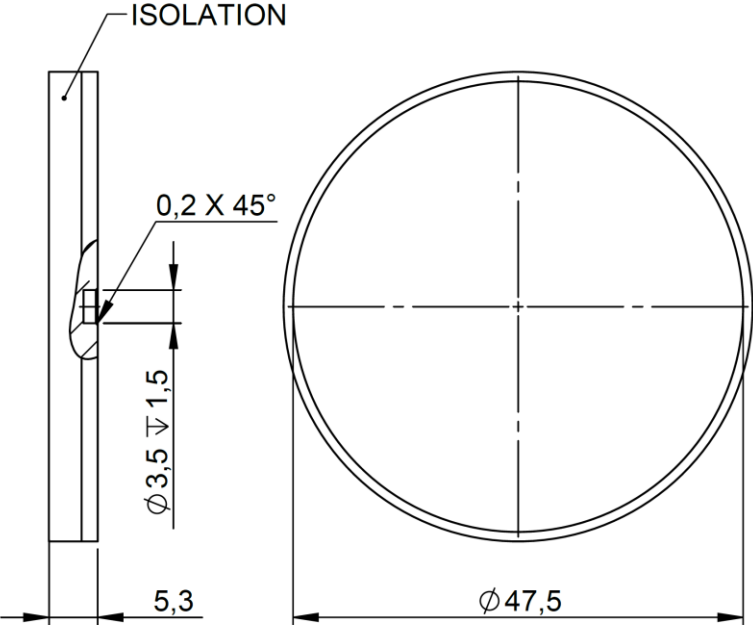
DIMENSIONS



Cathode side



Anode side



Dimensions in mm