

Reverse voltage (repetitive peak)		Vw7(bol72 T6)-0.Valu0.4(u)23691 TP	
Reverse voltage (DC)		V_R	650 V
Continuous forward current	($T_c=135^\circ\text{C}$)	I_F	10 A
Surge non-repetitive forward current	PW=10ms sinusoidal, $T_j=25^\circ\text{C}$		82 A
	PW=10ms sinusoidal, $T_j=150^\circ\text{C}$	I_{FSM}	69 A
	PW=10 μ s square, $T_j=25^\circ\text{C}$		300 A
Repetitive peak forward current		I_{FRM}	45 A
i^2t value	1 PW 10ms, $T_j=25^\circ\text{C}$		33 A^2s
	1 PW 10ms, $T_j=150^\circ\text{C}$	i^2dt	23 A^2s
Total power dissipation		P_D	71 W
Junction temperature		T_j	175 $^\circ\text{C}$
Range of storage temperature		T_{stg}	455 to 2175 $^\circ\text{C}$
*1 $T_c=100^\circ\text{C}$, $T_j=150^\circ\text{C}$, Duty cycle=10% *2 $T_c=25^\circ\text{C}$			

Thermal characteristics

Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Thermal resistance	$R_{th(j-c)}$	-	-	1.5	2.1	°C/W

Typical Transient Thermal Characteristics

Symbol	Value	Unit
R_{th1}	1.55E-02	K/W
R_{th2}	1.46E-01	
R_{th3}	1.32E+00	

Symbol	Value	Unit
C_{th1}	2.63E-04	Ws/K
C_{th2}	1.00E-03	
C_{th3}	2.13E-03	



Electrical characteristic curves

Symbol	Typical Value	Unit
a_0	9.66E-01	V
a_1	-1.10E-03	V/°C
b_0	3.52E-02	T
b_1	7.46E-05	T/°C
b_2	7.68E-07	T/°C ²