

Forward Conduction

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Repetitive peak reverse voltage	V_{RRM}	1200			V	$T_c=125^\circ\text{C}$
Non repetitive peak reverse voltage	V_{RSM}	1300			V	$T_c=125^\circ\text{C}$
Max. average forward current	$I_{F(AV)}$	85			A	Sinewave, 180° conduction, $T_c=75^\circ\text{C}$
Max. RMS forward current	$I_{F(RMS)}$	134			A	Nominal value
Max. peak, one-cycle forward, non-repetitive surge current	I_{FSM}	1100			A	10.0 msec (50Hz), half sinewave, $T_j = T_j \text{ MAX}$
Maximum I^2t for fusing	I^2t	6050			A^2s	
Max. forward voltage drop	V_F		1.75		V	$I_F = 250\text{A}; T_j = 25^\circ\text{C}$
Threshold voltage	V_{F0}		1.128	-	V	$T_j = T_j \text{ MAX}$
Slope resistance	r_t		2.11	-	$\text{m}\Omega$	$T_j = T_j \text{ MAX}$

Thermal and Mechanical Specifications

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Repetitive peak reverse leakage and off state	I_{RRM}			20	mA	$T_c=125^\circ\text{C}$
Repetitive peak reverse leakage and off state	I_{RRM}			100	μA	$T_j = 25^\circ\text{C}$
Operating temperature	T_j	-40	+125		$^\circ\text{C}$	
Storage temperature	T_{stg}	-40	+150		$^\circ\text{C}$	
Maximum Reverse Recovery Time	T_{rr}		50		ns	$V_r=30\text{V}; I=1\text{A}$
Reverse recovery charge	Q_{rr}		70	-	μC	
Thermal resistance - junction to case	$R_{\Theta(j-c)}$		0.30		K/W	
Thermal resistance - case to heatsink	$R_{\Theta(c-s)}$		0.25	-	K/W	
Mounting force	P			3.4	Nm	$\pm 20\%$
Weight	W	-	-	20	g	About
Case style				-	DO5	See Outline Table

CASE OUTLINE AND DIMENSIONS

Outlines Table

