Module Type

1 Diode

Maximum Ratings

Symbol	Item	Conditions	Values	Units
I_D	Output Current(D.C.)	Tc=85	110	A
I_{FSM}	Surge forward current	t=10mS Tvj =45	2250	A
i^2t	Circuit Fusing Consideration		25000	A^2s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
Tvj	Operating Junction Temperature		-40 to +125	
Tstg	Storage Temperature		-40 to +125	
Mt	Mounting Torque	To terminals(M5)	3±15%	Nm
Ms		To heatsink(M6)	5±15%	Nm
Weight	Module ÄApproximately Å		100	g

Thermal Characteristics

Symbol	Item	Conditions

1 Thyristor

Maximum Ratings

Symbol	Item	Conditions	Values	Units
I_{TAV}	Average On-State Current	Sine 180°;Tc=85	110	A
I_{TSM}	Surge On-State Current	T_{VJ}=45 t=10ms, sine T_{VJ}=125 t=10ms, sine	2250 1900	A
i^2t	Circuit Fusing Consideration	T_{VJ}=45 t=10ms, sine T_{VJ}=125 t=10ms, sine	25000 18000	A2s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
Tvj	Operating Junction Temperature		-40 to +130	
Tstg	Storage Temperature		-40 to +125	
Mt	Mounting Torque	To terminals(M5)	3 f 15%	Nm
Ms		To heatsink(M6)	5 f 15%	Nm
di/dt	Critical Rate of Rise of On-State Current	T_{VJ}= T_{VJM} , 2/3V_{DRM} ,I_G =500mA Tr<0.5us,tp>6us	150	A/us
dv/dt	Critical Rate of Rise of Off-State Voltage, min.	T_J=T_{VJM} ,2/3V_{DRM} linear voltage rise	1000	V/us
a	Maximum allowable acceleration		50	m/s^2

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to Case	0.28	/W
Rth(c-s)	Thermal Impedance, max.	Case to Heatsink	0.20	/W

Electrical Characteristics

Symbol	Item	Conditions	Values		Units
			Min.		

Performance Curves