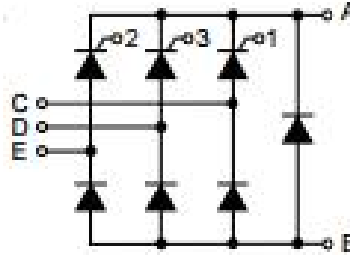


PRODUCT FEATURES

- Package with copper base plate
- Isolation voltage 3000V~
- Planar passivated chips
- Low forward voltage drop
- 1/4" fast-on power terminals

APPLICATIONS

- Supply for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors



ABSOLUTE MAXIMUM RATINGS

$T_c=25^{\circ}\text{C}$ unless otherwise specified

Symbol	Parameter	Test Conditions	Values	Unit
$I_{d(AV)}$		$T_J=85^{\circ}\text{C}$, module	70	A
$I_{d(AVM)}$		module	70	A
I_{FRMS}, I_{TRMS}		per leg	36	A
V_{RSM}, V_{DSM}	Maximum None Repetitive Reverse Voltage		1600	V
V_{RRM}, V_{DRM}	Maximum Repetitive Reverse Voltage		1600	V
I_{FSM}, I_{TSM}	$T_J=45^{\circ}\text{C}$, $V_R=0\text{ V}$	$t = 10\text{ms}$ (50Hz) ,sine	550	A
		$t = 8.3\text{ms}$ (60Hz) ,sine	600	
	$T_J=125^{\circ}\text{C}$, $V_R=0\text{ V}$	$t = 10\text{ms}$ (50Hz) ,sine	500	A
		$t = 8.3\text{ms}$ (60Hz) ,sine	550	
I^2t	$T_J=45^{\circ}\text{C}$, $V_R=0\text{ V}$	$t = 10\text{ms}$ (50Hz) ,sine	1520	A^2s
		$t = 8.3\text{ms}$ (60Hz) ,sine	1520	
	$T_J=125^{\circ}\text{C}$, $V_R=0\text{ V}$	$t = 10\text{ms}$ (50Hz) ,sine	1250	A^2s
		$t = 8.3\text{ms}$ (60Hz) ,sine	1250	
V_T		$T_J=25^{\circ}\text{C}, I_T=80\text{A}$	max.1.64	V
I_D, I_R		$T_J=125^{\circ}\text{C}, V_D=V_{DRM}, V_R=V_{RRM}$	max.5	mA
V_{RGM}			10	V
V_{To}		For power-loss calculations only	0.85	V
r_T			11	$\text{m}\Omega$

I_H	$T_J = 25^{\circ}\text{C}$	$V_D = 6\text{V}$	≤ 200	mA
I_L	$T_J = 25^{\circ}\text{C}$	$I_G = 0.45\text{A}, di_G/d_T = 0.45\text{A/us}, t_p = 10\text{us}$	≤ 450	mA
V_{GT}	$V_D = 6\text{V}$	$T_J = 25^{\circ}\text{C}$	≤ 1.5	V
		$T_J = -40^{\circ}\text{C}$	≤ 1.6	
I_{GT}	$V_D = 6\text{V}$	$T_J = 25^{\circ}\text{C}$	≤ 100	mA
		$T_J = -40^{\circ}\text{C}$	≤ 200	
V_{GD}	$T_J = 125^{\circ}\text{C}, V_D = 2/3V_{DRM}$		≤ 0.2	V
I_{GD}			≤ 5	mA
t_{gd}	$T_J = 25^{\circ}\text{C}, V_D = 1/2V_{DRM}$	$I_G = 0.45\text{A}, di_G/d_T = 0.45\text{A/us}$	≤ 2	us
t_q	$T_J = 125^{\circ}\text{C}, V_D = 2/3V_{DRM}$	$I_T = 20\text{A}, di_G/d_T = -10\text{A/us}, t_p = 200\text{us}$ $V_R = 100\text{V}, dv/d_T = 15\text{V/us}$	250	us
T_J	Junction Temperature		-40 to +125	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range		-40 to +125	$^{\circ}\text{C}$
V_{isol}		a.c. 50/60Hz, r.m.s, 1s/1min	3000/2500	V~
M_d	Mounting torque (M5)		5	N.m
$R_{\theta JC}$	Per thyristor/Diode; DC per module		0.9	K /W
			0.15	
Weight			50	g

