JD150E

Description

1) Low forward voltage drop
2) Fully insulated package
3) Easy to use and parallel
4) Industry standard outline
5) Designed and qualified for industrial level

Typical Application

Optimized for power conversion: welding and industrial SMPS applications

Absolute Maximum Ratings(Packaged into SOT-227, unless otherwise specified, T_{CASE}=25)

Parameter	Test Conditions	Symbol	Values			Unit
			16	18	20	
Junction temperature range		T_j	-40-150			
Storage temperature range		T_{STG}	-40-125			
	$_j$=25 ,I_{RRM}=5uA	V_{RRM}	1600	1800	2000	V
Non-repetitive peak reverse voltage	T_j=25	V_{RSM}	1700	1900	2100	V
Average forward current	T_C=100	$I_{F(AV)}$	150			A
Surge forward current	t_P=10ms,sin 180°, T_j=25	I_{FSM}	4200			A
I^2t value	t_P=10ms,sin 180°, T_j=25					

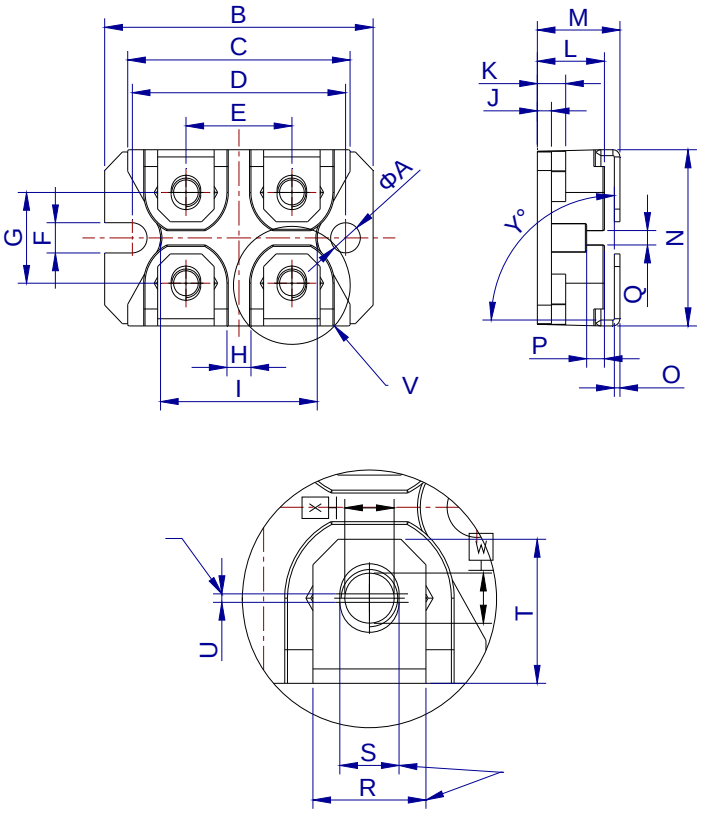
Electrical Characteristics(Packaged into SOT-227, unless otherwise specified, T_{CASE}=25)

Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Forward voltage	I_F=150A ,T_j=25	V_F	-	1.1	1.25	V
Reverse leakage current	V_R=V_{RRM}, T_j=25	I_R	-	-	200	μA
	V_R=V_{RRM}, T_j=150		-	-	10	mA

Thermal Characteristics(Packaged into SOT-227, unless otherwise specified, T_{CASE}=25)

Parameter	Test Conditions	Symbol	Values	Unit)

Mechanical Characteristics



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.1		4.4	0.161		0.173
B	38.0		38.4	1.496		1.512
C		31.5			1.240	
D	30.1		30.3	1.185		1.193
E		15.0			0.591	
F	4.1		4.4	0.161		0.173
G		12.5				
H						
I		21.6				
J		2				
K		4.05				
L		9.5			0.374	
M	11.6		12.2	0.457		0.480
N	24.7		25.5	0.972		1.004
O		0.8			0.031	
P						
Q		1.7				
R		8				
S		4.2				
T		10.7				
U						

Technical requirements
1.Unmarked tolerances of dimension are performed in accordance with GB/T 1804-2000 Level C
2.Unmarked tolerances of form and position are performed in accordance with GB/T 1184-1996 Level L