Name: AnSP75FRD12, AnSA75FRD12

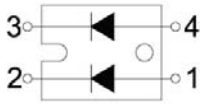
Applications

- Antiparallel diode for switching devices
- Free wheeling diode in converters and motor control circuits
- Inductive heating
- UPS

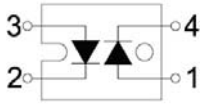
Features

- Low switching losses
- Soft, fast switching
- Planar passivated chip
- Cooler operation
- Max. operating junction temperature 150 °C

AnSP75FRD12



AnSA75FRD12



Product Summary

Part Number	V_{RR}	V_F	I_F	Packaging
AnSP75FRD12	1200 V	2.5 V	2 × 75 A	Box
AnSA75FRD12				

Table 1. Absolute Maximum Ratings

	Parameter	Value	Units
V_R	D.C. Reverse voltage	1200	V
V_{RRM}	Repetitive Reverse voltage		
I_F, T_C=25 ºC	Forward Current	2 × 75	A
I_{FM}, T_C=25 ºC	Pulsed Forward Current	2 × 150	
P_{tot}	Power dissipation T_C=25 °C per diode	175	W
T_j	Operating Temperature	–55 to +150	ºC
T_{stg}	Storage Temperature	–55 to +125	
T_L	Lead Temperature for 10 sec	300	
	Weight	30 (Typical)	g
V_{IS}	Insulation Test Voltage t=1 min	2500	Vrms
	Mounting Torque	1.1	N * m

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E-mail: export@angstrem.ru , market@angstrem.ru ;
Web: www.angstrem.ru

Table 2. Thermal resistance

Symbol	Parameter	Min	Max	Units	Test Conditions
R_{thJc}	Junction-to-Case, per diode	–	0.64	°C/W	
R_{thJA}	Junction-to-Ambient	–	40		

Table 3. Electrical Characteristics @ T_J=25°C

Symbol	Parameter	Min.	Typ.	Max.	Units	Test Conditions
V_F	Forward Voltage	–	1.9	2.5	V	I_F=75 A
		–	2.1	3.0		I_F=75 A, T_j=125 °C
I_{RR}	Reverse Leakage Current	–	0.01	0.25	mA	V_R=1200 V
		–	0.8	5.0		V_R=1200 V, T_j=125 °C

Table 4. Recovery Characteristics

Symbol	Parameter	Min.	Typ.	Max.	Units	Test Conditions
I_{rrm}	Maximum Reverse Recovery Current	–	45	–	A	I_F=75 A, di_F/dt=0.4 A/ns, T_j=25 °C
t_{rr}	Diode Reverse Recovery Time	–	180	300	ns	
Q_{rr}	Diode Reverse Recovery Charge	–	4.0	–	µC	

Precious metal content into 1000 pieces:

Gold _____ g;
Silver _____ g.

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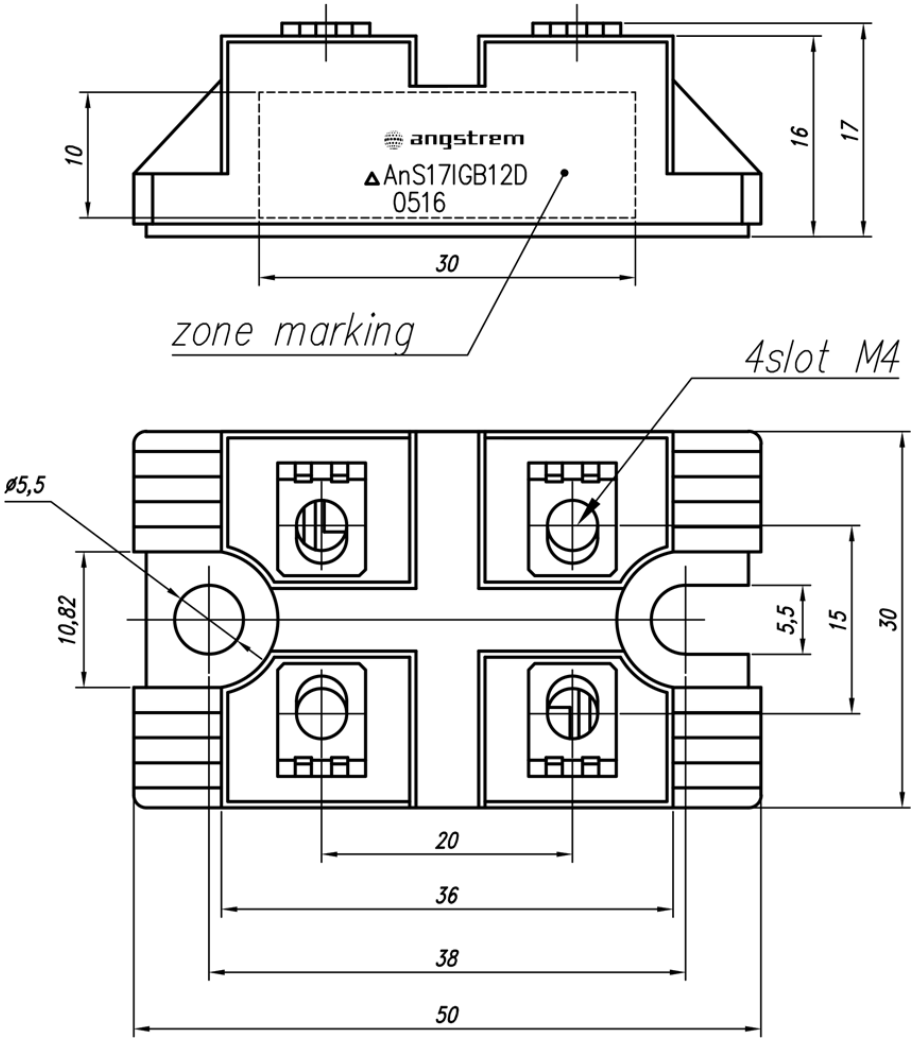
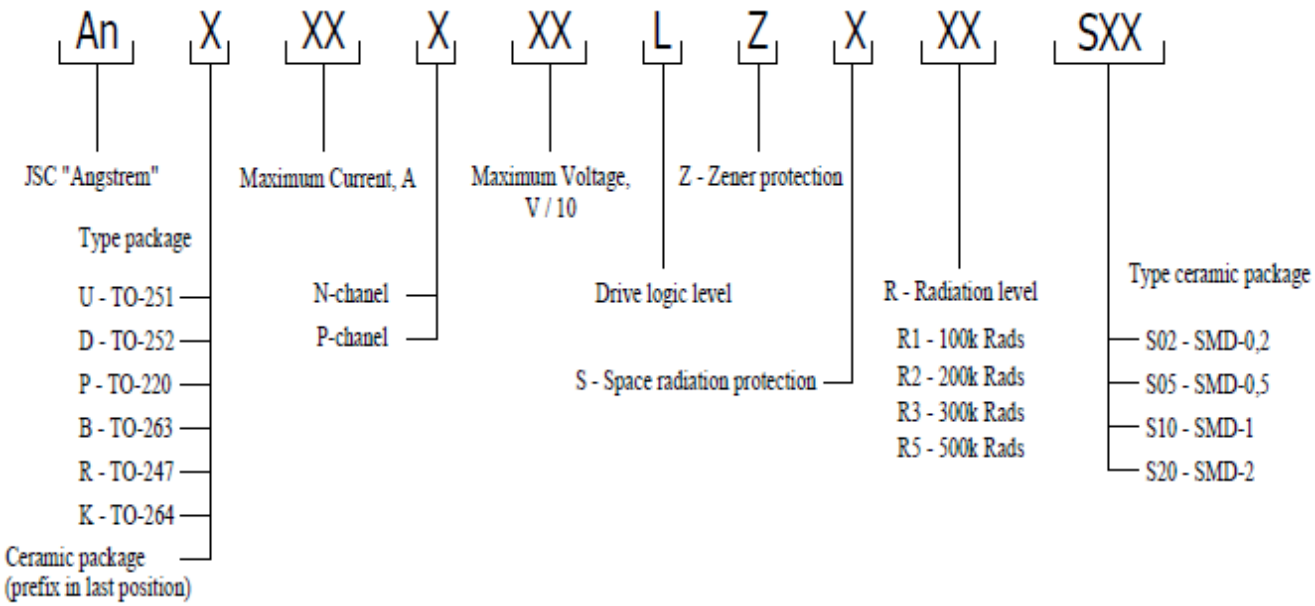
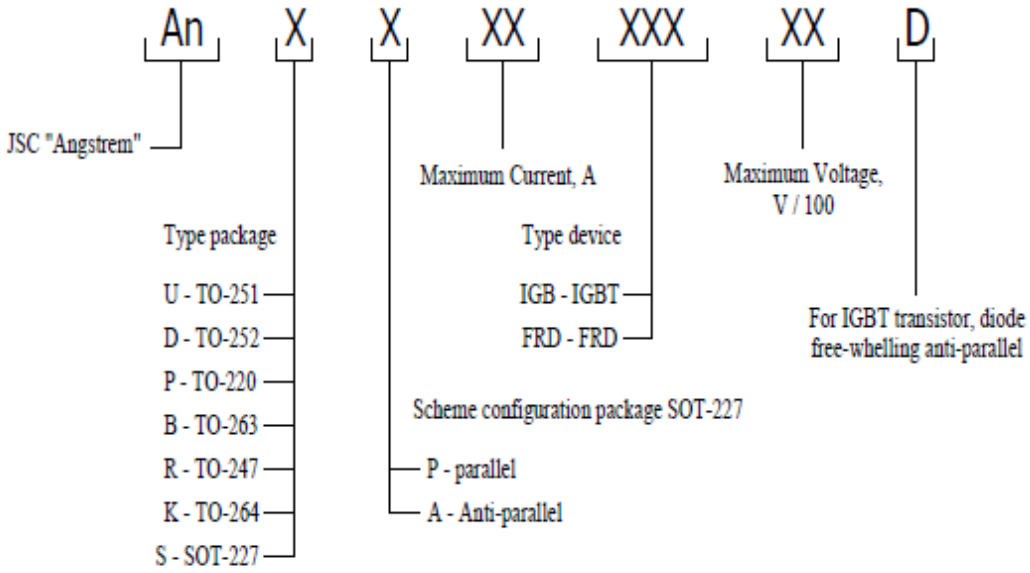
Case Outline and Dimensions - SOT-227 miniBlock



Description name MOSFET



Description name IGBT & FRD



Sample:

AnB7N60	- MOSFET N-chanel, 7A, 600V, package TO-263
An10N70R1S10	- MOSFET N-chanel, 10A, 700V, Radiation level 100k Rads, package SMD-1
AnR75IGB12	- IGBT, 75A, 1200V, package TO-247
An50FRD17	- FRD, 50A, 1700V, chip
AnSP100FRD04	- FRD, 200A, 400V, package SOT-227 configuration two diode parallel