Transys Electronics LIMITED

FSTI12020 THRU FSTI120100

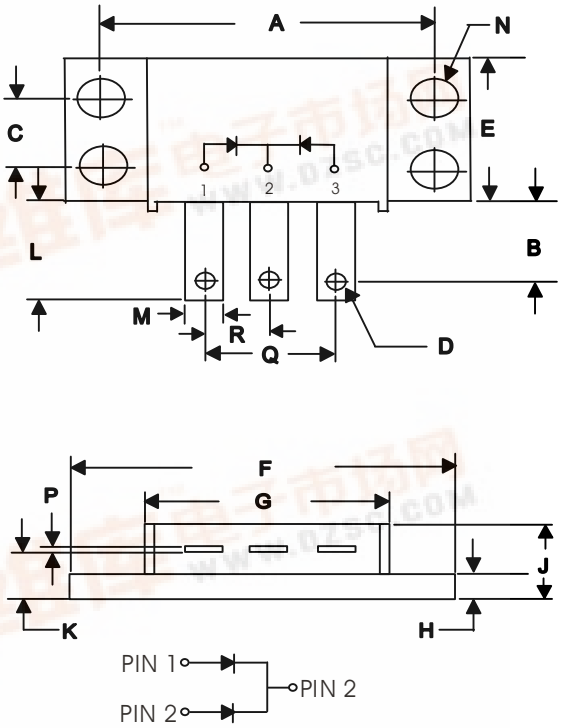
SCHOTTKY DIODES MODULE TYPE 120A

Features

- High Surge Capability
- Types Up to 100V V_{RRM}
- Isolated heatsink

120Amp Rectifier
20-100 Volts

POWER MOD
TO-249AA



Maximum Ratings

Operating Temperature: -40 ℃ to +125 ℃
Storage Temperature: -40 ℃ to +175 ℃

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FSTI12020	20V	14V	20V
FSTI12030	30V	21V	30V
FSTI12035	35V	25V	35V
FSTI12040	40V	28V	40V
FSTI12045	45V	32V	45V
FSTI12060	60V	42V	60V
FSTI12080	80V	56V	80V
FSTI120100	100V	70V	100V

Electrical Characteristics @ 25 ℃ Unless Otherwise Specified

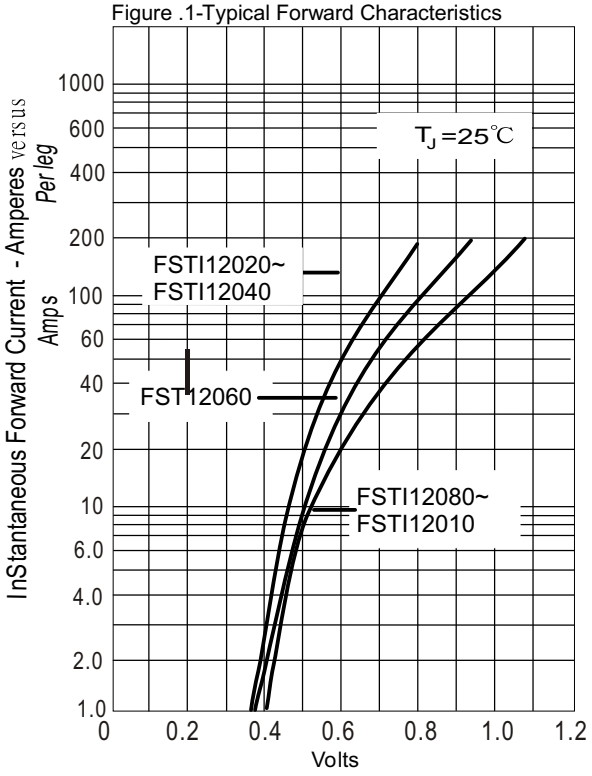
Average Forward Current (Per Pkg)	$I_{F(AV)}$	120A	T_C =135 ℃
Peak Forward Surge Current (Per leg)	I_{FSM}	1200A	8.3ms , half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	V_F	0.63V 0.75V 0.84V	(FSTI12020~FSTI12045) (FSTI12060) (FSTI12080~FSTI120100) I_{FM} =60A; T_j = 25 ℃
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I_R	2 mA 600 mA	T_J = 25 ℃ T_J = 125 ℃
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	1.0℃/W	

NOTE :
(1) Pulse Test: Pulse Width 300 usec, Duty Cycle < 2%

DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	1.995	2.005	50.67	50.93	
B	.300	.325	7.62	8.26	
C	.495	.505	12.57	12.83	
D	.182	.192	4.62	4.88	Ø
E	.990	1.010	25.15	26.65	
F	2.390	2.410	60.71	61.21	
G	1.495	1.525	37.90	38.70	
H	.114	.122	2.90	3.10	
J	-----	0.420	-----	10.67	
K	.240	.260	6.10	6.60	
L	.490	.510	12.45	12.95	
M	.330	.350	8.38	8.90	
N	.175	.195	4.45	4.95	Ø
P	.035	.045	0.89	1.14	
R	.445	.455	11.30	11.56	
Q	.890	.910	22.61	23.11	

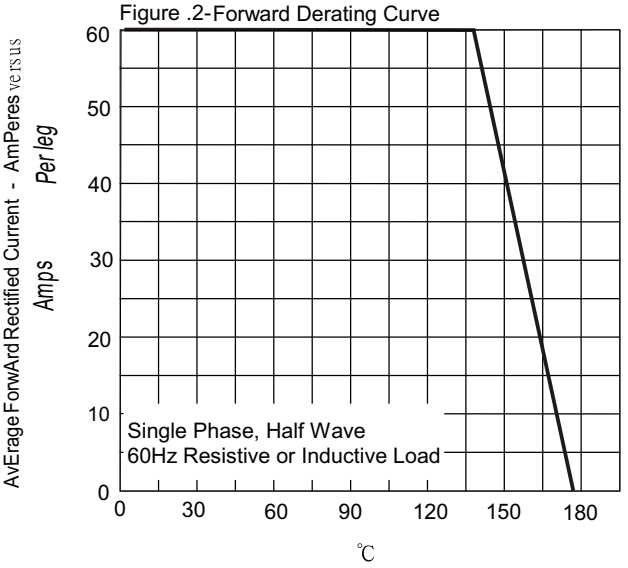
FSTI12020 THRU FSTI120100

Figure .1-Typical Forward Characteristics



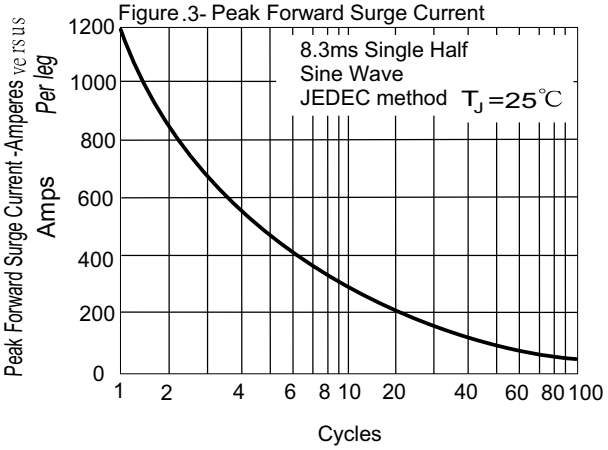
Instantaneous Forward Voltage - Volts

Figure .2-Forward Derating Curve



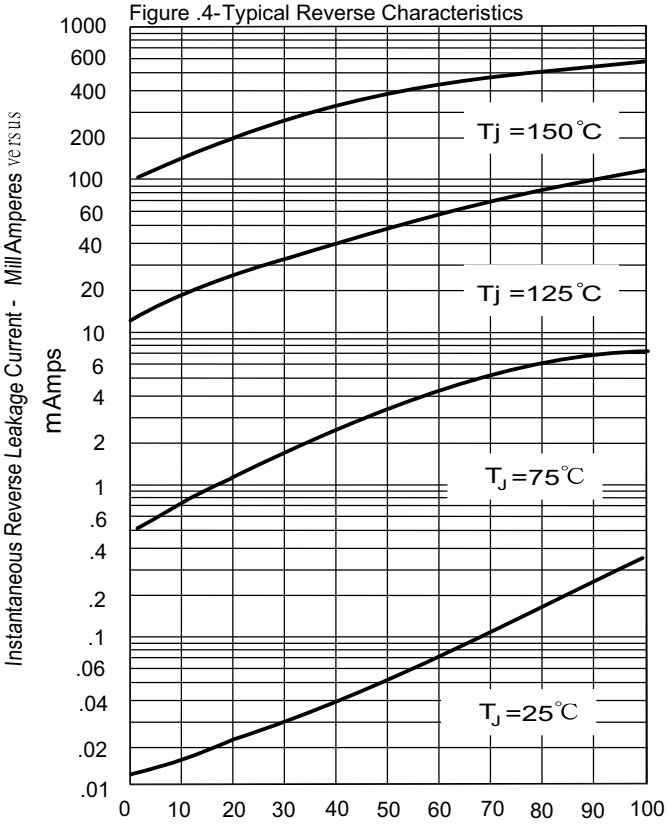
Case Temperature - ℃

Figure .3- Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



Reverse Voltage - Volts