Transys Electronics LIMITED

FST16020 THRU FST160100

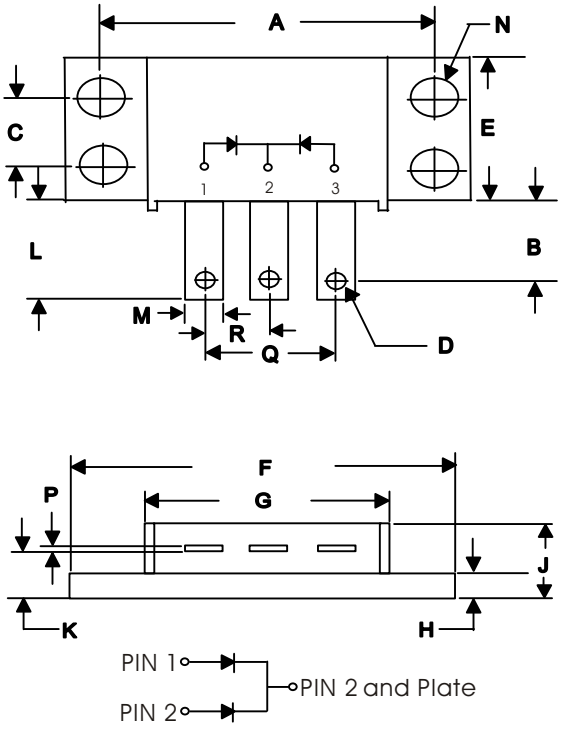
SCHOTTKY DIODES MODULE TYPE 160A

Features

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

160Amp Rectifier
20-100 Volts

POWER MOD
TO-249AB



Maximum Ratings

Operating Temperature: -40 °C to +125 °C
Storage Temperature: -40 °C to +175 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FST16020	20V	14V	20V
FST16030	30V	21V	30V
FST16035	35V	25V	35V
FST16040	40V	28V	40V
FST16045	45V	32V	45V
FST16060	60V	42V	60V
FST16080	80V	56V	80V
FST160100	100V	70V	100V

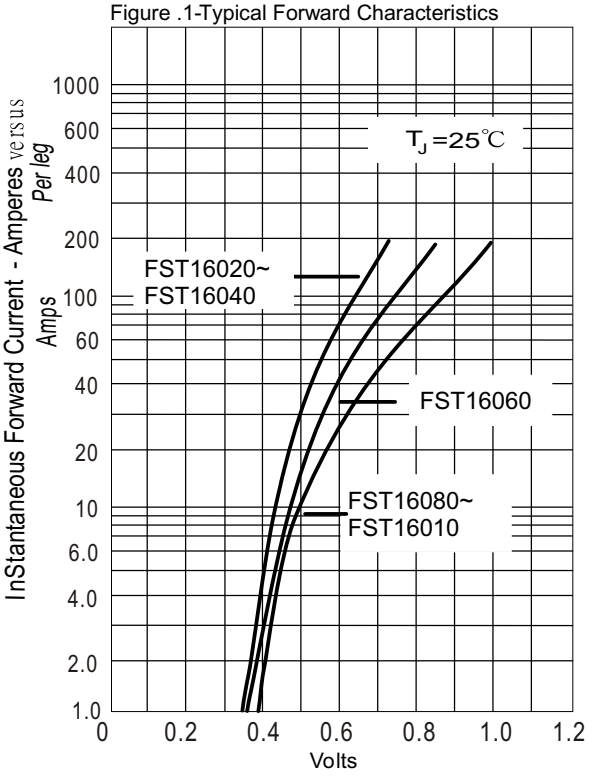
Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per Pkg)	$I_{F(AV)}$	160A	T_C =115 °C
Peak Forward Surge Current (Per leg)	I_{FSM}	1200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	V_F	0.65V 0.75V 0.84V	(FST16020~FST16045) (FST16060) (FST16080~FST160100) I_{FM} =80A; T_j = 25 °C
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I_R	2 mA 200 mA	T_J = 25 °C T_J = 125 °C
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	1.0°C/W	

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

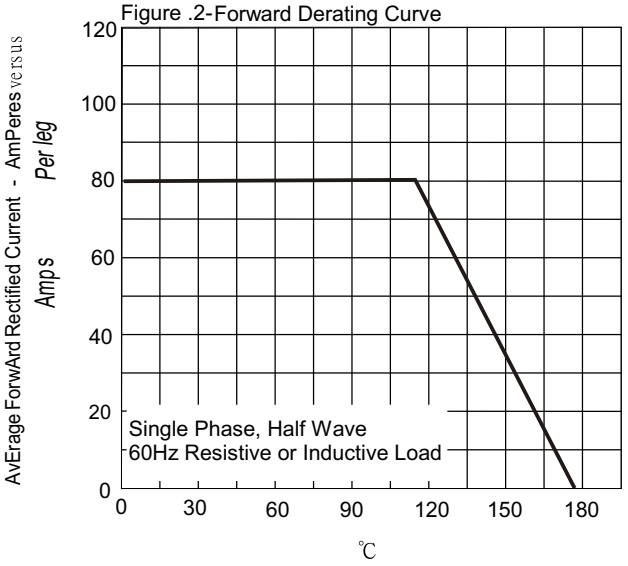
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	1.995	2.005	50.67	50.93	
B	.300	.325	7.62	8.26	
C	.495	.505	12.57	12.83	
D	.182	.192	4.62	4.88	Ø
E	.990	1.010	25.15	26.65	
F	2.390	2.410	60.71	61.21	
G	1.495	1.525	37.90	38.70	
H	.114	.122	2.90	3.10	
J	-----	0.420	-----	10.67	
K	.240	.260	6.10	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	

Figure .1-Typical Forward Characteristics



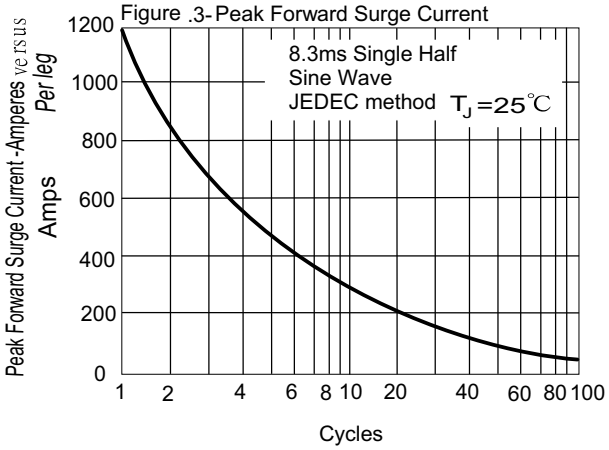
Instantaneous Forward Voltage - Volts

Figure .2-Forward Derating Curve



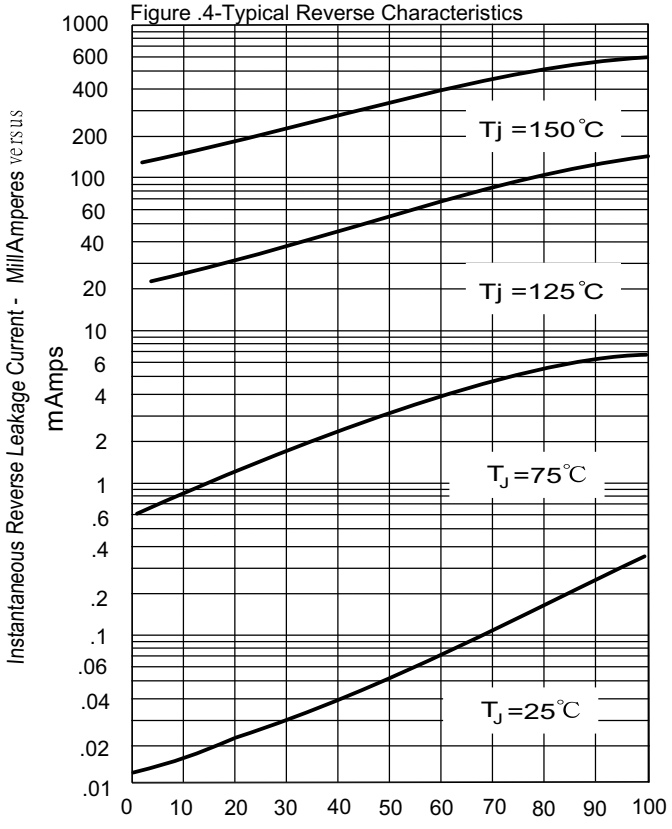
Case Temperature - ℃

Figure .3-Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



Reverse Voltage - Volts