

SCHOTTKY DIODES MODULE TYPE 80A

Features

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

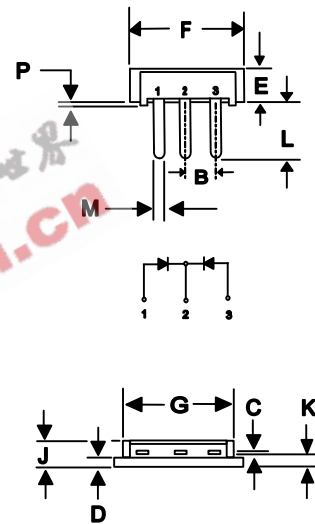
80Amp Rectifier
20-100 Volts

MINI MOD
D61-3SM

Maximum Ratings

Operating Temperature: -40°C to $+175^{\circ}\text{C}$
Storage Temperature: -40°C to $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FST8320SM	20V	14V	20V
FST8330SM	30V	21V	30V
FST8335SM	35V	25V	35V
FST8340SM	40V	28V	40V
FST8345SM	45V	32V	45V
FST8360SM	60V	42V	60V
FST8380SM	80V	56V	80V
FST83100SM	100V	70V	100V



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	-----	-----	-----	-----	
B	.200	NOM	5.08	NOM	2PL
C	.027	.037	0.69	0.94	
D	.088	.098	2.24	2.49	
E	.350	.370	8.89	9.40	
F	.777	.797	19.74	20.24	
G	.695	.715	17.65	18.16	
J	.240	.260	6.10	6.60	
K	.115	.135	2.92	3.43	
L	.457	.477	11.61	12.12	
M	.065	.085	1.65	2.16	
N	-----	-----	-----	-----	∅
P	.015	.025	0.38	0.64	

Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	80A	$T_C = 100^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	800A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	V_F	0.65V 0.75V 0.84V	(FST8320SM-FST8345SM) (FST8360SM) (FST8380SM-FST83100SM) $I_{FM} = 40\text{ A}; T_j = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I_R	1.5 mA 500 mA	$T_j = 25^{\circ}\text{C}$ $T_j = 125^{\circ}\text{C}$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	1.2 °C/W	

NOTE :

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

Figure .1-Typical Forward Characteristics

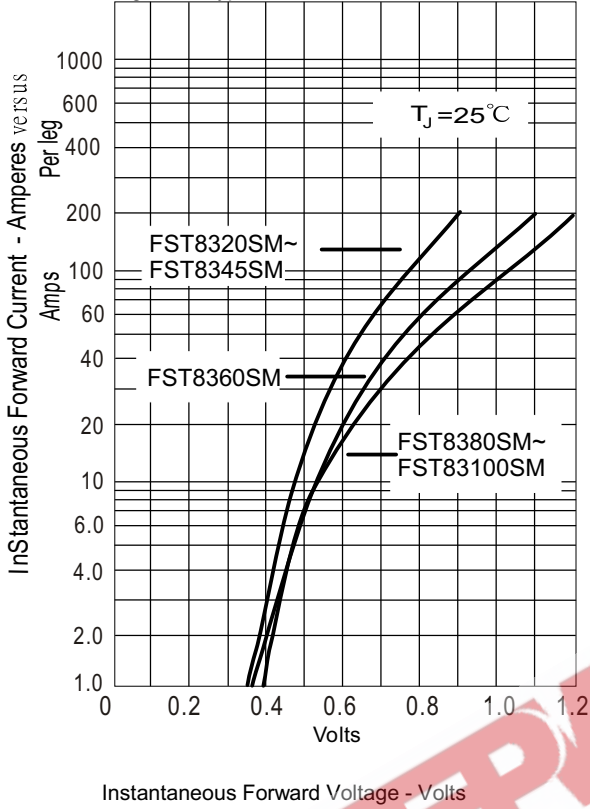
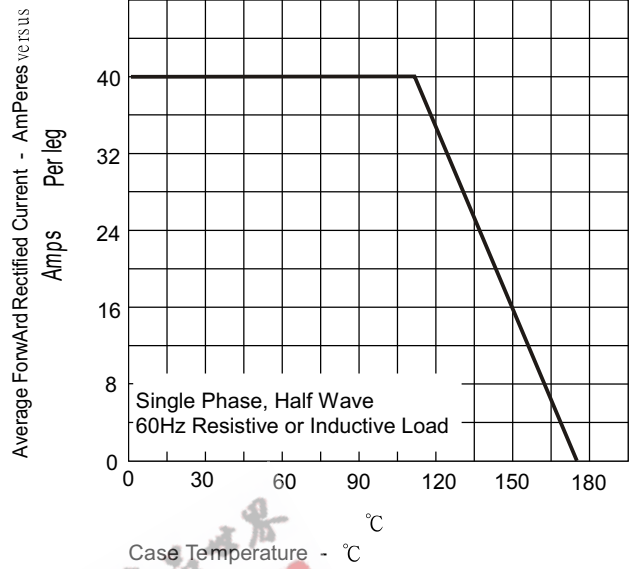


Figure .2-Forward Derating Curve



Instantaneous Forward Voltage - Volts

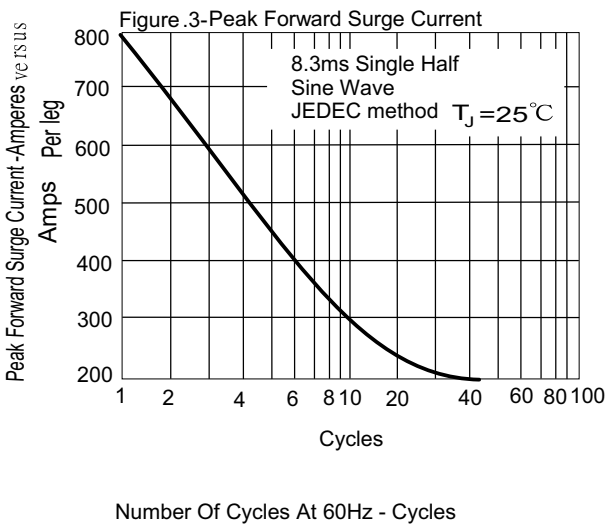


Figure .4-Typical Reverse Characteristics

