



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

D12PS20--D12PS100

FEATURES

- Super long operating life
- Plastic package has Underwriters Laboratory
Flammability Classification 94V-0



Lead-free

MECHANICAL DATA

- Case: TO-277B molded plastic body
- Mounting position: ANY

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	D12 PS20	D12 PS30	D12 PS40	D12 PS45	D12 PS50	D12 PS60	D12 PS90	D12 PS100	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	45	50	60	90	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	31.5	35	42	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	45	50	60	90	100	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	12								A
Peak forward surge current 8.3ms single half sine -wave	I_{FSM}	275								A

Thermal Characteristics

Characteristic	Symbol	D12 PS20	D12 PS30	D12 PS40	D12 PS45	D12 PS50	D12 PS60	D12 PS90	D12 PS100	UNITS	
Operating temperature range	T _J	- 55 ---- +125							- 55 ---- +150		°C
Storage temperature range	T _{STG}	- 55 ---- +150									°C

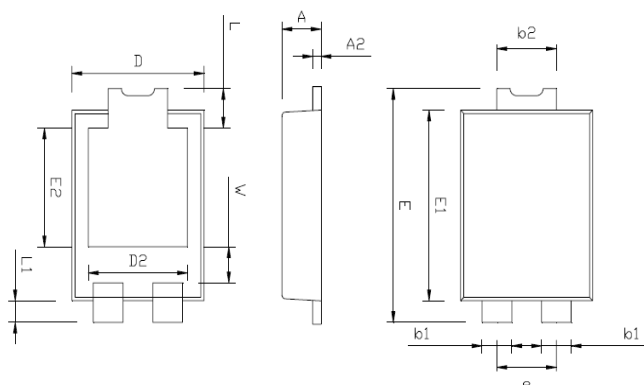
Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	D12 PS20	D12 PS30	D12 PS40	D12 PS45	D12 PS50	D12 PS60	D12 PS90	D12 PS100	UNITS
Maximum instantaneous forward voltage at 12A	V _F	0.55				0.70		0.85		V
Maximum DC reverse current TJ=25℃ at rated DC blocking voltage TJ=100℃	I _R	0.2 20								m A

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PACKAGE OUTLINE DIMENSIONS



TO-277B		
Dim	Min	Max
A	1.00	1.30
A2	0.15	0.43
b1	0.75	1.05
b2	1.65	1.95
D	3.75	4.30
D2	2.80	3.20
E	6.35	6.70
e	1.65	1.95
E1	5.25	5.50
E2	3.05	3.55
L	0.85	1.30
L1	0.45	0.75
W	0.80	1.20
All Dimensions in mm		

PACKAGE INFORMATION

Device	Package	Shipping
D12PS20--D12PS100	TO-277B	4000/Tape&Reel