LOW VF SCHOTTKY RECTIFIERS	REVERSE VOLTAGE 100 Volts FORWARD CURRENT 20 Amperes

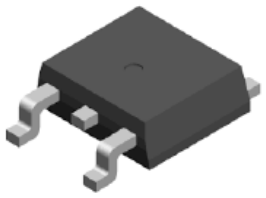
FEATURES

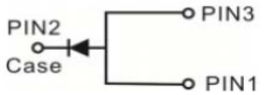
- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability

MECHANICAL DATA

- Case: TO-252 (D-PAK)
- Polarity: As Marked

TO-252 (D-PAK)





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25˚C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Characteristics	Symbol	S20L100SD			Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100			V
Maximum RMS Voltage	V_{RMS}	70			V
Breakdown voltage per diode I_R=0.5mA	V_{BR}	100			V
Instantaneous forward voltage per diode		Min.	Typ.	Max.	
I_F=5A, T_J=25°C	V_F		0.51		V
I_F=10A, T_J=25°C	V_F		0.6		V
I_F=20A, T_J=25°C	V_F		0.7	0.75	V
I_F=5A, T_J=125°C	V_F		0.46		V
I_F=10A, T_J=125°C	V_F		0.55		V
I_F=20A, T_J=125°C	V_F		0.65		V
Reverse current per diode V_R=70V, T_J=25°C	I_R			100	μA
Reverse current per diode V_R=70V, T_J=125°C	I_R		25		mA
Maximum average forward rectified current per device	$I_{F(AV)}$	20			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load per device	I_{FSM}	200			A
Typical thermal resistance per diode (Note 1)	$R_{\theta JC}$	25			°C/W
Junction and StorageTemperature Range	T_J, T_{STG}	-55 to +150			°C

NOTES:

1.Mounted on infinite heatsink.

Rating and Characteristic Curves

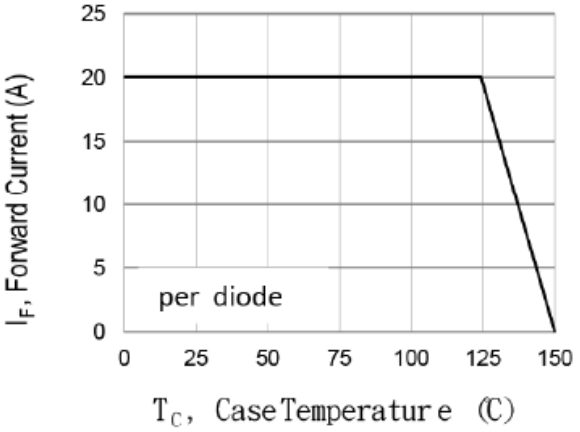


Fig.1 Forward Current Derating Curve

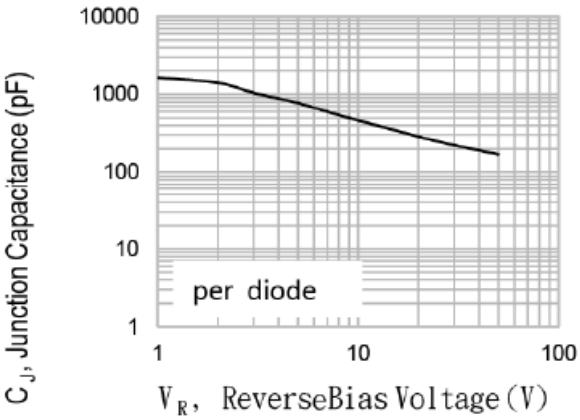


Fig.2 Typical Junction Capacitance

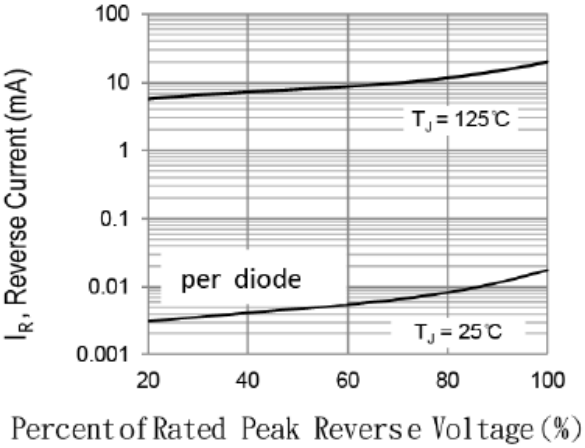


Fig.3 Typical Reverse Characteristics

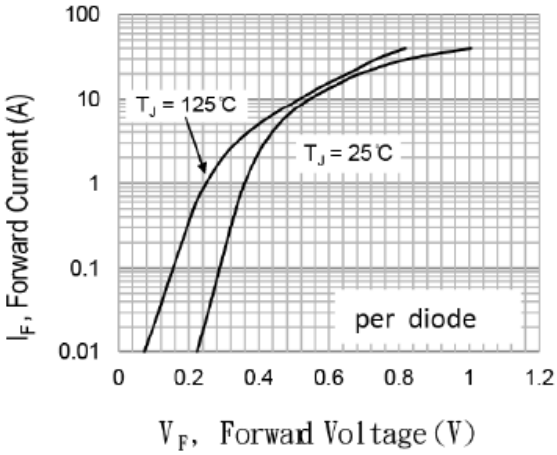
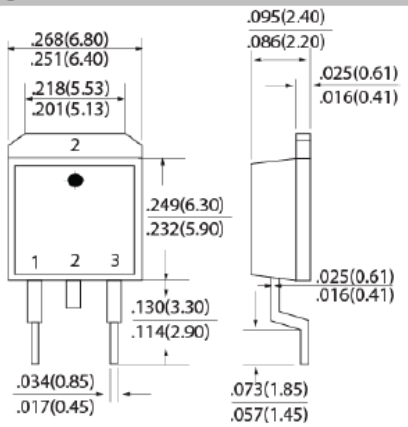


Fig.4 Typical Forward Characteristics

Package Outline Dimensions

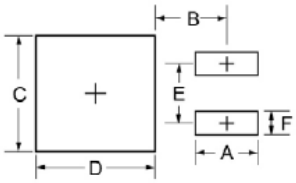


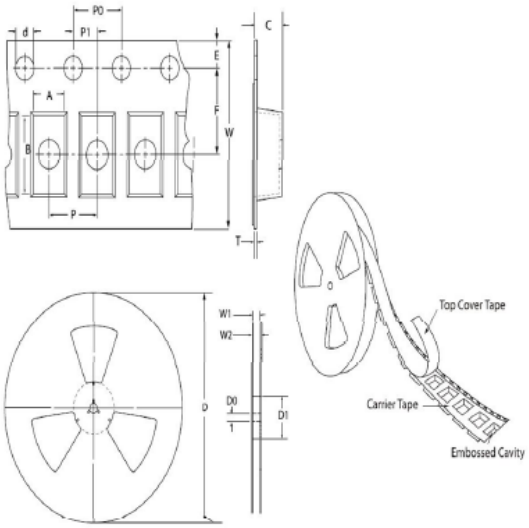
D-PAK

Dimensions in inches and (millimeters)

Suggested Pad Layout

Symbol \ Outline	D-PAK millimeters
A	2.00
B	3.70
C	5.80
D	5.85
E	4.57
F	1.20



Tape & Reel Specification

Item	Symbol	D-PAK (mm)
Carrier width	A	6.9±0.10
Carrier length	B	10.5±0.10
Carrier depth	C	2.7±0.10
Sprocket hole	d	1.55±0.10
Reel outside diameter	D	330±2
Reel inner diameter	D1	100±1
Feed hole width	D2	21±1
Sprocket hole position	E	1.75 ±0.10
Punch hole position	F	7.5±0.10
Punch hole pitch	P	8.00±0.10
Sprocket hole pitch	P0	4.00±0.10
Embossment center	P1	2.00 ±0.10
Tape width	W	16.00+0.3/-0.1
Reel width	W1	16.40±1