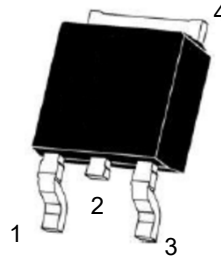
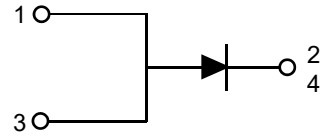


## Low VF Schottky Barrier Rectifiers

### Feature

- Low power loss , high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any


**TO-252 (Top View)**

**Circuit Diagram**

### Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	65	V
Maximum RMS Voltage	$V_{RMS}$	46	V
Maximum DC Blocking Voltage	$V_{DC}$	65	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	150	A
Typical Junction Capacitance <sup>1)</sup>	$C_J$	500	pF
Typical thermal resistance <sup>2)</sup>	$R_{\theta JA}$	50	°C/W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~+150	°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. Mounted on infinite heat sink..

### Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units	
Breakdown Voltage	$V_{BR}$	$I_R = 0.5mA$	65	-	-	V	
Instantaneous Forward Voltage	$V_F$	$I_F = 1A$	-	0.39	-	V	
		$I_F = 2A$	-	0.43	-		
		$I_F = 5A$	-	0.5	0.55		
Reverse Current	$I_R$	$V_R = 36V$	-	5.0	-	μA	
		$V_R = 60V$	$T_J = 25°C$	-	-	50	μA
			$T_J = 100°C$	-	12	-	mA

## Typical Characteristics

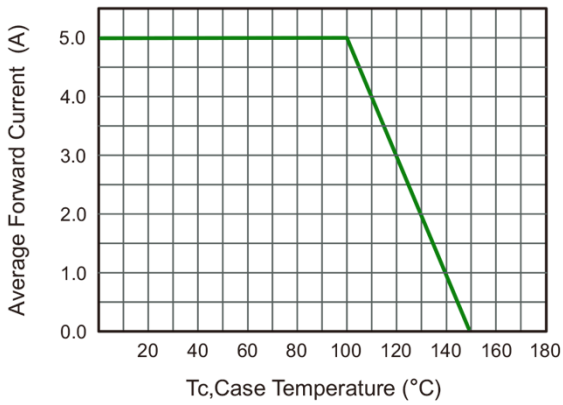


Fig.1 Typical Forward Current Derating Curve

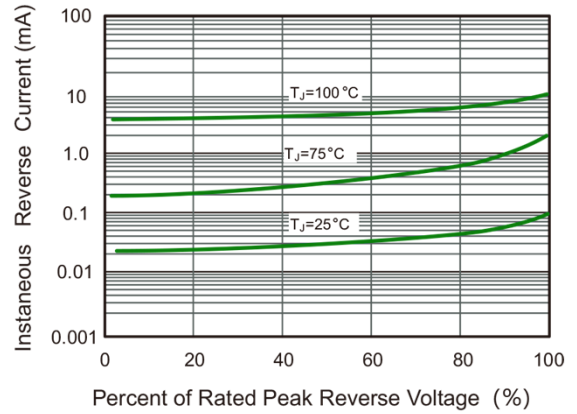


Fig.2 Typical Reverse Characteristics

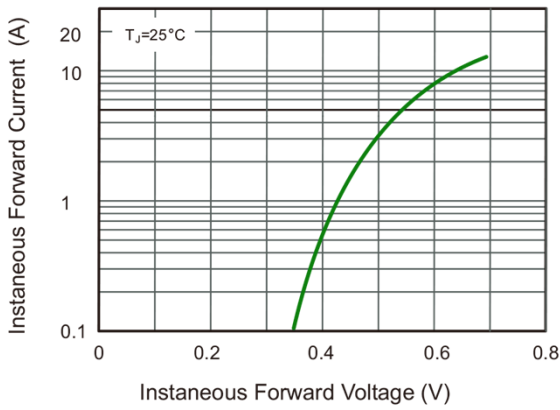


Fig.3 Typical Forward Characteristic

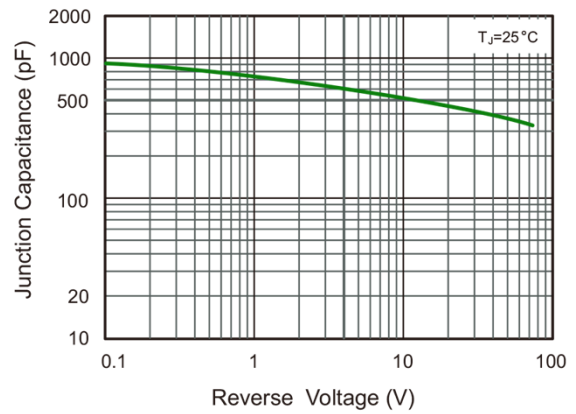


Fig.4 Typical Junction Capacitance

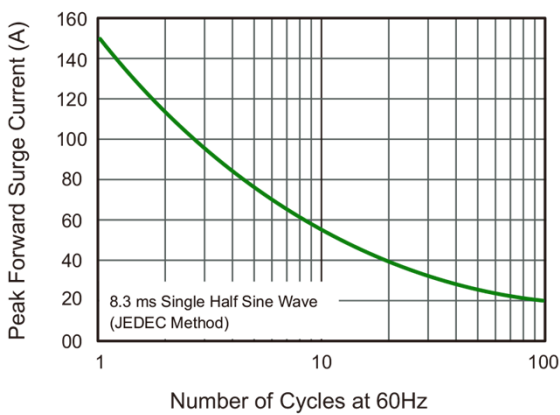
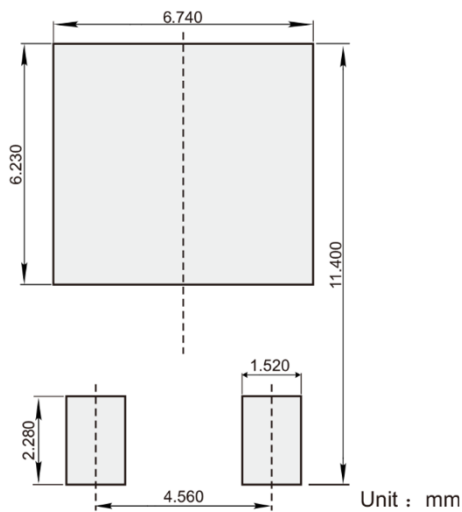
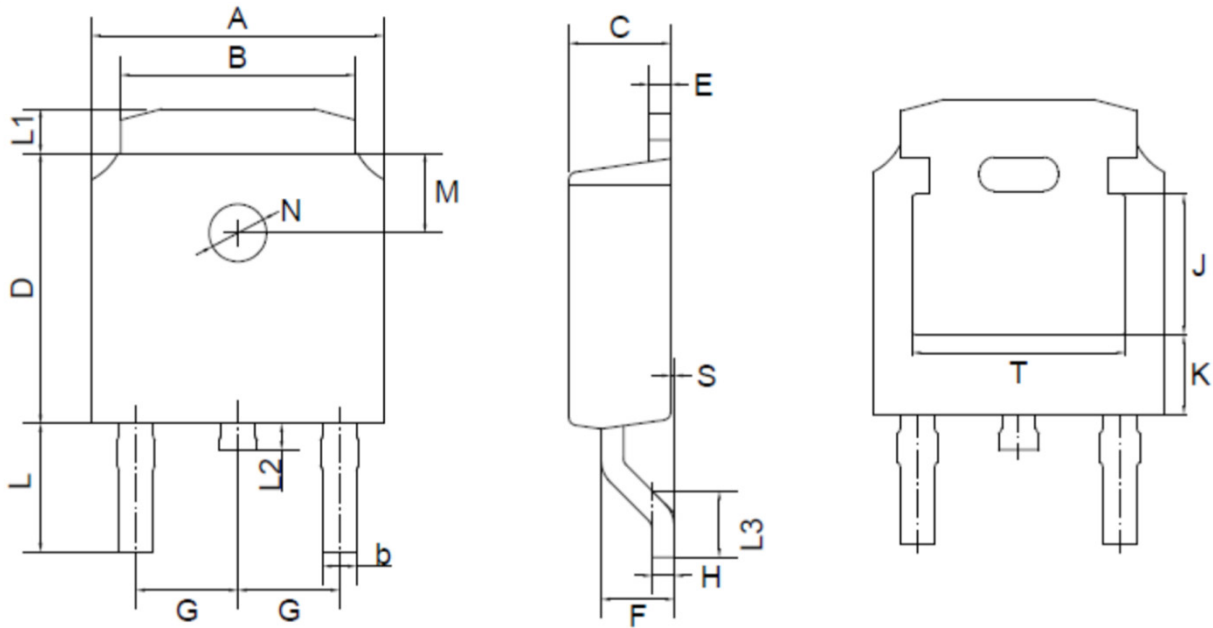


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

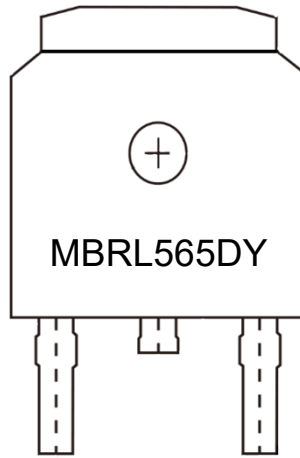
## Product Dimension (TO-252)



Suggested PCB Layout

Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	6.30	6.70	0.248	0.264
B	5.10	5.50	0.201	0.217
b	0.66	0.86	0.026	0.033
C	2.10	2.50	0.083	0.098
D	5.90	6.30	0.232	0.248
E	0.40	0.60	0.016	0.024
F	1.30	1.80	0.051	0.071
G	2.29 Typ.		0.090 Typ.	
H	0.45	0.55	0.018	0.022
L	2.70	3.10	0.106	0.122
L1	0.80	1.20	0.031	0.047
L2	0.60	1.00	0.024	0.039
L3	1.00	1.75	0.039	0.069
S	0.00	0.23	0.000	0.009
M	1.80 Typ.		0.071 Typ.	
N	1.30 Typ.		0.051 Typ.	
J	3.16 Ref.		0.124 Ref.	
K	1.80 Ref.		0.071 Ref.	
T	4.83 Ref.		0.190 Ref.	

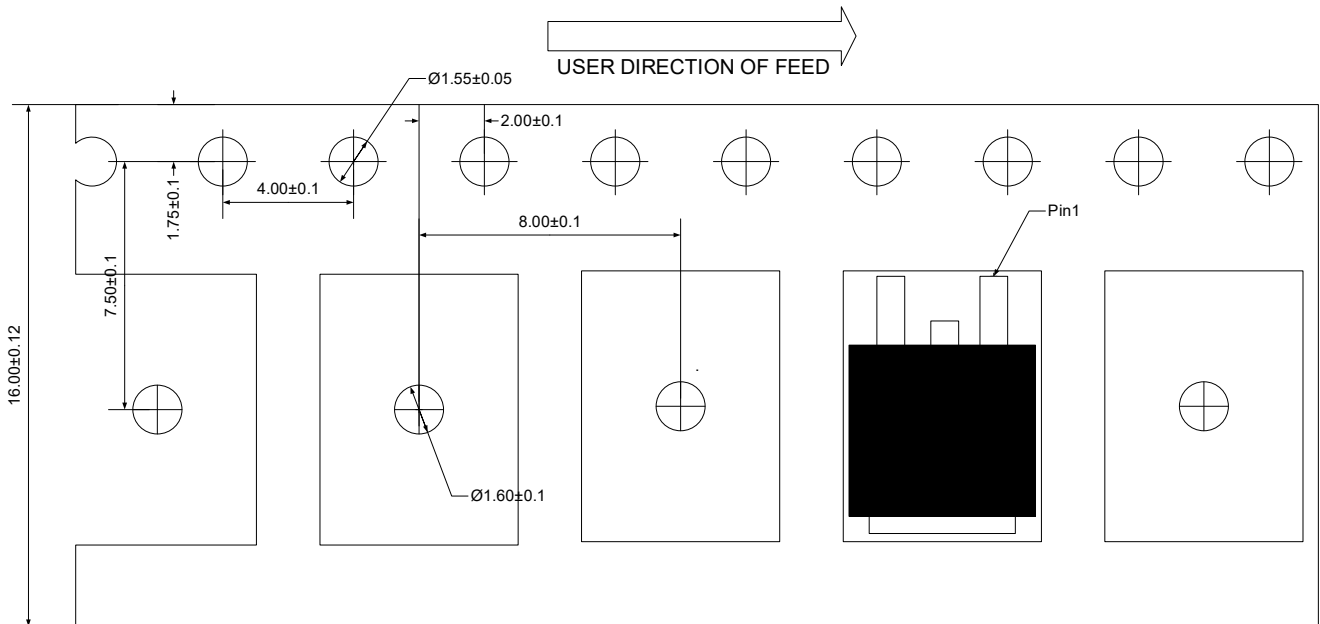
Marking Information




Ordering Information

Device	Package	Reel	Shipping
PSBDDP65V5S	To-252	13"	2500 / Tape & Reel

Load With Information




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