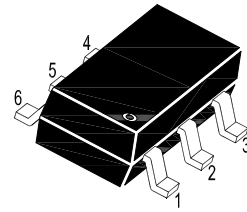
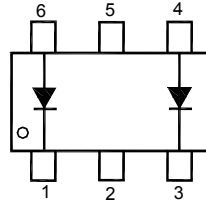


# MMBD227DW

## Silicon Epitaxial Planar Switching Diode

### Applications

- Ultra high speed switching



1. A1 2. NC 3. C2  
4. A2 5. NC 6. C1  
Marking Code: KC  
SOT-363 Plastic package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	80	V
Reverse Voltage	$V_R$	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Surge current ( $t = 1\text{ }\mu\text{s}$ )	$I_{FSM}$	4	A
Peak Forward Current (Single)	$I_{FM}$	300	mA
Power Dissipation	$P_{tot}$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	1.2	V
Peak Reverse Current at $V_R = 70\text{ V}$	$I_R$	0.1	$\mu\text{A}$
Total Capacitance at $V_R = 6\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	3.5	pF
Reverse Recovery Time at $V_R = 6\text{ V}$ , $I_F = 5\text{ mA}$ , $R_L = 50\text{ }\Omega$	$t_{rr}$	4	ns

**TOP DYNAMIC**



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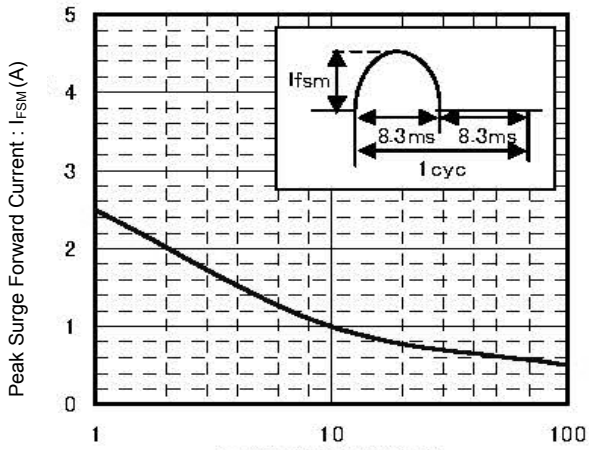


Figure 1.  $I_{FSM}$  - Cycle Characteristics

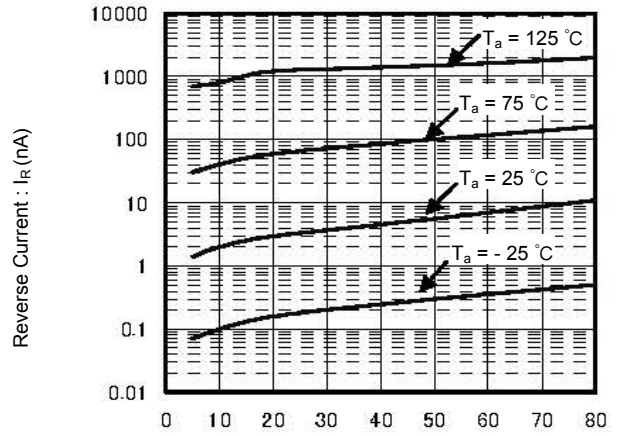


Figure 2.  $V_R - I_R$  Characteristics

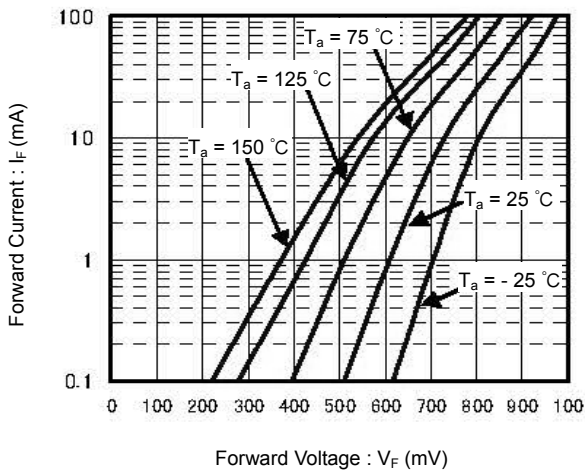
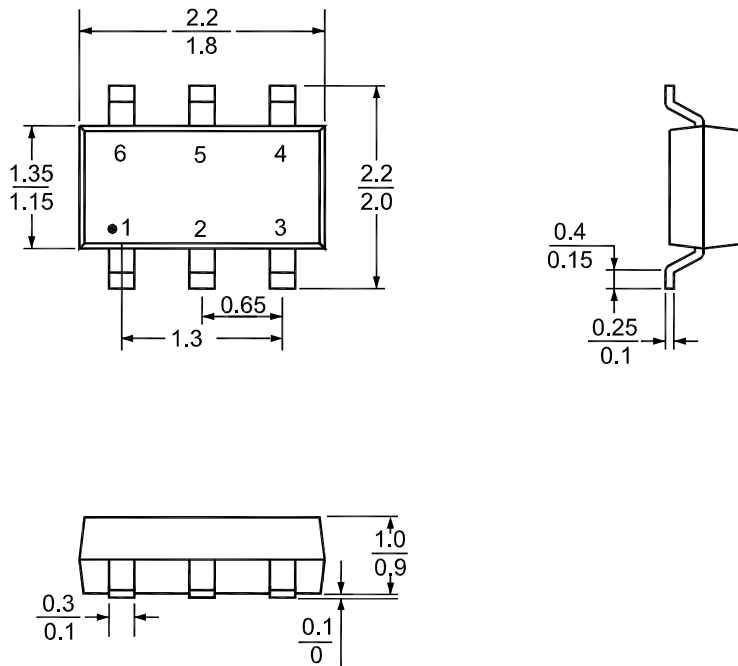


Figure 3.  $V_F - I_F$  Characteristics

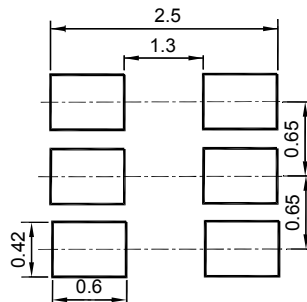
# MMBD227DW

Package Outline Dimensions (Units: mm)

SOT-363



## RECOMMENDED SOLDERING FOOTPRINT



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-363	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

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