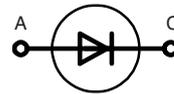


# Power Schottky Rectifier

$I_{FAV} = 6 \text{ A}$   
 $V_{RRM} = 25 \text{ V}$   
 $V_F = 0.3 \text{ V}$

$V_{RSM}$	$V_{RRM}$	Type	marking
V	V		on product
25	25	DSS 6-0025BS	6Y025BS


**TO-252 AA**


A = Anode, C = Cathode , TAB = Cathode

Symbol	Conditions	Maximum Ratings	
$I_{FRMS}$		20	A
$I_{FAV}$	$T_C = 140^\circ\text{C}$ ; rectangular, $d = 0.5$	6	A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $t_p = 10 \text{ ms}$ (50 Hz), sine	80	A
$E_{AS}$	$I_{AS} = \text{tbd A}$ ; $L = 180 \mu\text{H}$ ; $T_{VJ} = 25^\circ\text{C}$ ; non repetitive	tbd	mJ
$I_{AR}$	$V_A = 1.5 \cdot V_{RRM}$ typ.; $f = 10 \text{ kHz}$ ; repetitive	tbd	A
$(dv/dt)_{cr}$		1000	V/ $\mu\text{s}$
$T_{VJ}$		-55...+150	$^\circ\text{C}$
$T_{VJM}$		150	$^\circ\text{C}$
$T_{stg}$		-55...+150	$^\circ\text{C}$
$P_{tot}$	$T_C = 25^\circ\text{C}$	40	W
Weight	typical	0.3	g

**Features**

- International standard package
- Very low  $V_F$
- Extremely low switching losses
- Low  $I_{RM}$ -values
- Epoxy meets UL 94V-0

**Applications**

- Rectifiers in switch mode power supplies (SMPS)
- Free wheeling diode in low voltage converters

**Advantages**

- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Low losses

**Dimensions see Outlines.pdf**

Symbol	Conditions	Characteristic Values	
		typ.	max.
$I_R$ ①	$T_{VJ} = 25^\circ\text{C}$ $V_R = V_{RRM}$		6 mA
	$T_{VJ} = 125^\circ\text{C}$ $V_R = V_{RRM}$		40 mA
$V_F$	$I_F = 6 \text{ A}$ ; $T_{VJ} = 125^\circ\text{C}$	0.30	V
	$I_F = 6 \text{ A}$ ; $T_{VJ} = 25^\circ\text{C}$	0.40	V
	$I_F = 12 \text{ A}$ ; $T_{VJ} = 125^\circ\text{C}$	0.40	V
$R_{thJC}$		3.0	K/W

Pulse test: ① Pulse Width = 5 ms, Duty Cycle < 2.0 %  
 Data according to IEC 60747 and per diode unless otherwise specified