

## DIODE

### D232-50, D232-50X

<ul style="list-style-type: none"> <li>◆ <math>V_{RRM} = \underline{100 - 1600 V}</math></li> <li>◆ <math>I_{F(AV)} = \underline{50 A}</math> (<math>T_C = 150\text{ }^\circ\text{C}</math>)</li> <li>◆ <math>I_{FSM} = \underline{1,2 kA}</math> (<math>T_j = 190\text{ }^\circ\text{C}</math>)</li> </ul>		
<ul style="list-style-type: none"> <li>◆ Hermetic metal cases with glass insulators</li> <li>◆ Threaded studs of ISO</li> </ul>		

#### MAXIMUM RATED VALUES

Parameter and conditions	Symbol	Values	Units
Repetitive peak reverse voltage, $T_j = -60 \dots + 190\text{ }^\circ\text{C}$	$V_{RRM}$	100-1600	V
Non- repetitive peak reverse voltage, $T_j = -60 \dots + 190\text{ }^\circ\text{C}$	$V_{RSM}$	200-1700	
Repetitive peak reverse current, $T_j = 190\text{ }^\circ\text{C}$ , $V_R = V_{RRM}$	$I_{RRM}$	6	mA
Maximum average forward current, $f = 50\text{ Hz}$ , $T_C = 150\text{ }^\circ\text{C}$	$I_{F(AV)}$	50	A
RMS forward current, $f = 50\text{ Hz}$ , $T_C = 140\text{ }^\circ\text{C}$	$I_{FRMS}$	78	
Surge non-repetitive current, $T_j = 190\text{ }^\circ\text{C}$ , $V_R = 0$ , $t_p = 10\text{ ms}$	$I_{FSM}$	1,2	kA
Safety factor	$I^2t$	7,2	kA <sup>2</sup> s
Operation junction temperature range	$T_j$	-60 to +190	°C
Storage temperature range	$T_{stg}$	-60 to +50	°C

#### ELECTRICAL CHARACTERISTICS

Parameter and conditions	Symbol	Values			Units
		min	typ.	max	
Maximum peak forward voltage, $T_j = 25\text{ }^\circ\text{C}$ , $I_F = 157\text{ A}$	$V_{FM}$	-	-	1,35	V
On-state threshold voltage, $T_j = 190\text{ }^\circ\text{C}$ , $I_F = 78 - 235\text{ A}$	$V_{TO}$	-	-	0,922	
On-state slope resistance, $T_j = 190\text{ }^\circ\text{C}$ , $I_F = 78 - 235\text{ A}$	$r_T$	-	-	2,74	mΩ

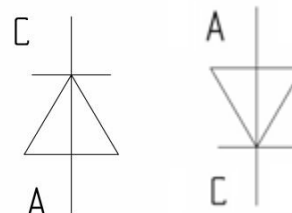
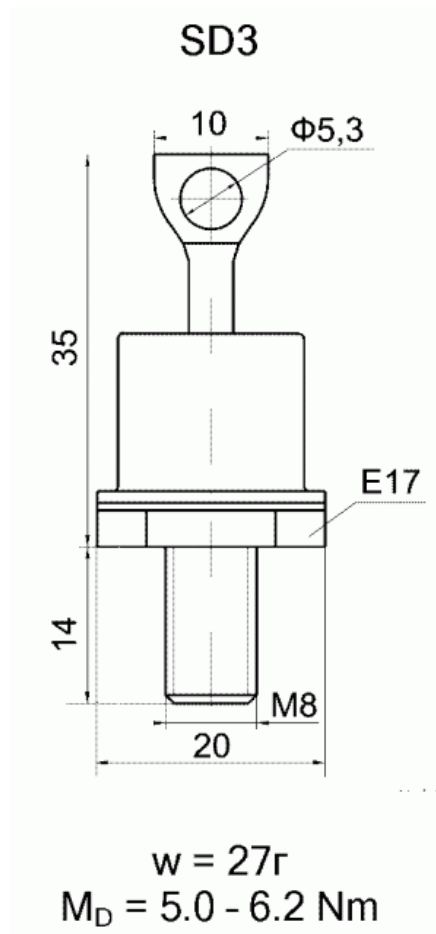


## D232-50, D232-50X

<b>THERMAL PARAMETERS</b>					
Thermal resistance junction to case	$R_{th(j-c)}$	-	-	0,6	°C/W
Thermal resistance case to heatsink	$R_{th(c-h)}$	-	-	0,3	
<b>MECHANICAL PARAMETERS</b>					
Weight	w	-	0,027	-	kg
Mounting torque	$M_d$	5,0	-	6,2	Nm



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C – Cathode, A – Anode

**Device Outline Drawing**  
(dimensions in mm)



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