

**CS52600512**

**FAST RECOVERY DIODE**



Case style DO-205AC

**Features**

- High FAST recovery diode
- High voltage rating 1400 V
- High current capability
- DO-205AC

**Typical applications**

- High voltage free-wheeling diode
- Fast recovery rectifier applications

Compliance to RoHS.

**ELECTRICAL SPECIFICATIONS ( T<sub>E</sub> = 25°C)**

Symbol	Ratings		Value	Unit
V <sub>RRM</sub>	Maximum repetitive peak reverse voltage	T <sub>E</sub> = 25°C	1400	V
I <sub>F(AV)</sub>	Maximum avg. forward current	T <sub>E</sub> = 150°C	100	A
V <sub>FM</sub>	Maximum peak forward voltage drop	I <sub>F(AV)</sub> rated	1.3	V
I <sub>FSM</sub>	Maximum peak one cycle (non-rep) surge current	10 ms	2200	A
I <sub>FRM</sub>	Maximum peak repetitive surge current		5000	A
I <sup>2</sup> t	Maximum I <sup>2</sup> t rating (non-rep)	For 5 to 10 ms	25000	A <sup>2</sup> s



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### THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
$R_{thJC}$	Maximum thermal resistance, junction to case	0.4	°C/W
$T_j$	Operating junction temperature range	-65 to 150	°C
$T_{stg}$	Storage temperature	-65 to 200	°C
<b>F</b>	Mounting torque (non-lubricated threads)	>2 <3	
<b>W</b>	Approximate allowable weight	±150	G

### ELECTRICAL CHARACTERISTICS

TE=25°C unless otherwise noted

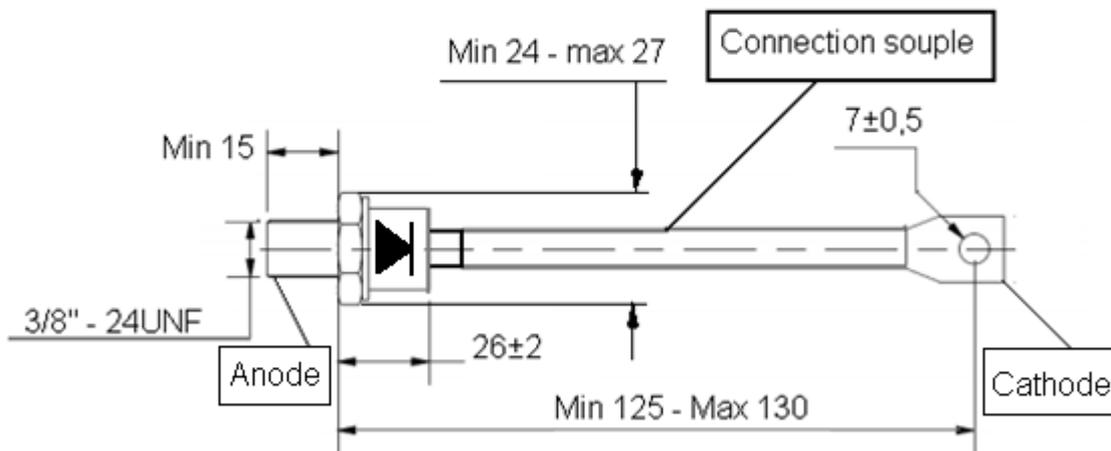
Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
$V_{RRM}$	Repetitive peak reverse blocking voltage	$T_j = -25^{\circ}\text{C}$ to $+125^{\circ}\text{C}$	1400	-	-	V
$V_{RSM}$	Non repetitive peak reverse voltage	$T_j = -25^{\circ}\text{C}$ to $+125^{\circ}\text{C}$	1600	-	-	V
$I_{RRM}$	Reverse leakage current	$V_{RRM}=1400\text{ V}$ $T_j = 125^{\circ}\text{C}$	-	-	20	mA
$I_{F(rms)}$	RMS forward current	$T_C = 65^{\circ}\text{C}$	280	-	-	A
$I_{F(AV.)}$	Ave. forward current		100	-	-	A
<b>IFSM</b>	Single cycle surge current		2500	-	-	A
<b>VT</b>	Forward voltage drop	600 A, $T_j = 125^{\circ}\text{C}$	-	-	2	V
<b>I<sup>2</sup>t</b>	I <sup>2</sup> t for fusing		13500	-	-	A <sup>2</sup> s



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**MECHANICAL DATA CASE TO-205AC**

**Dimensions en MM**



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