

STANDARD RECOVERY DIODE APPLICATIONS
Features:

Wide current range
 High surge current capabilities
 Stud cathode and stud anode version

Typical Applications:

Converters
 Power supplies
 Machine tool controls
 Battery charges

Forward Conduction

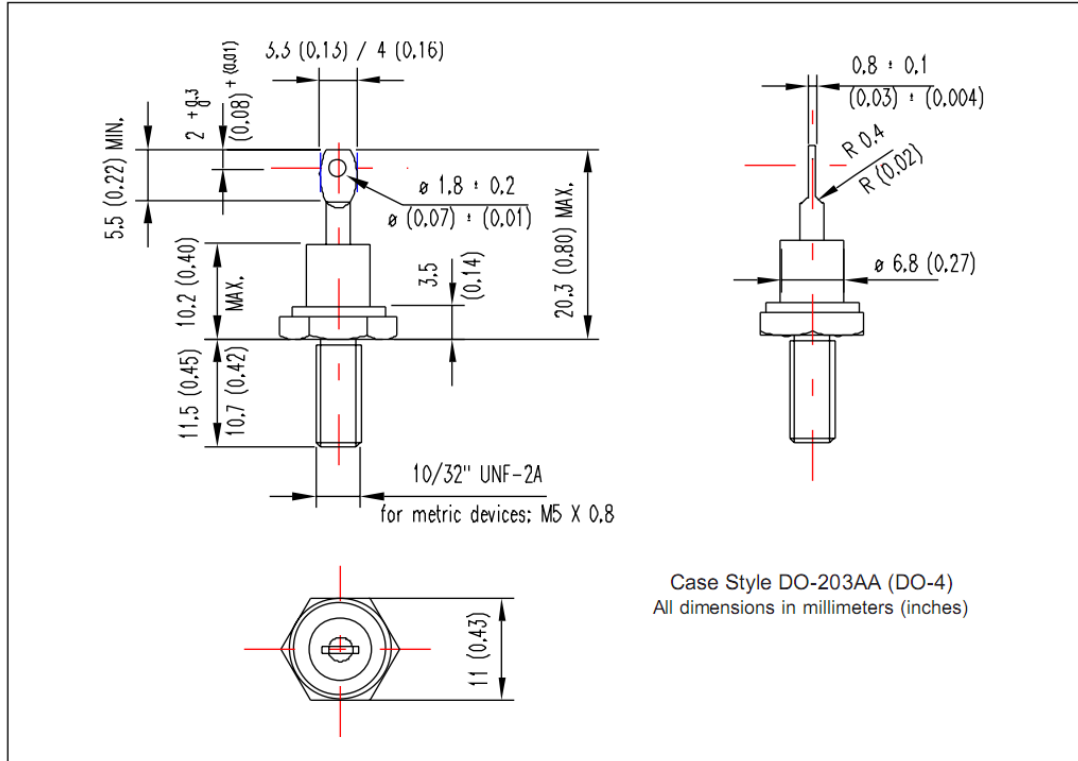
Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Repetitive peak reverse voltage	V_{RRM}	1000			V	
Non repetitive peak reverse voltage	V_{RSM}	1100			V	
Max. average forward current	$I_{F(AV)}$	25			A	Sinewave, 180° conduction, $T_c=120^\circ\text{C}$
Max. RMS forward current	$I_{F(RMS)}$	40			A	Nominal value
Max. peak, one-cycle forward, non-repetitive surge current	I_{FSM}	356			A	10.0 msec (50Hz), sinusoidal wave-shape, 180° conduction, $T_j = 180^\circ\text{C}$
Maximum I^2t for fusing	I^2t	636			A ² s	
Max. forward voltage drop	V_{FM}		1.30		V	$I_{TM} = 78\text{ A}; T_{vj}=25^\circ\text{C}$
Threshold voltage	V_{F0}		0.9		V	

Thermal and Mechanical Specifications

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-65	+175		°C	
Storage temperature	T_{stg}	-65	+200		°C	
Thermal resistance - junction to case	$R_{\theta(j-c)}$		-	1.5	K/W	
Thermal resistance - case to heatsink	$R_{\theta(c-s)}$		-	0.5	K/W	
Mounting force	P			1.2	Nm	± 10%
Weight	W	-	-	-	g	
Case style				DO-4		See Outline Table

CASE OUTLINE AND DIMENSIONS.

Outlines Table



Ordering Information Table

Device Code	
A	25
F	R
120	M
①	②
③	④
⑤	⑥

- 1** - A = Avalanche diode
None = Standard diode
- 2** - Current rating: Code = $I_{F(AV)}$
- 3** - F = Standard device
- 4** - None = Stud Normal Polarity (Cathode to Stud)
R = Stud Reverse Polarity (Anode to Stud)
- 5** - Voltage code: Code x 10 = V_{RRM} (See Voltage Ratings table)
- 6** - None = Stud base DO-203AA (DO-4) 10-32UNF-2A
M = Stud base DO-203AA (DO-4) M5 X 0.8 - (Not available for Avalanche diodes)