

**DS75 DSI75**  
**DSA75 DSAI75**

**$V_{RRM} = 800-1800 \text{ V}$**   
 **$I_{F(RMS)} = 160 \text{ A}$**   
 **$I_{F(AV)M} = 110 \text{ A}$**

**Rectifier Diode**  
**Avalanche Diode**

**Features**

- International standard package, JEDEC DO-203 AB (DO-5)
- Planar glassivated chips

**Applications**

- High power rectifiers
- Field supply for DC motors
- Power supplies

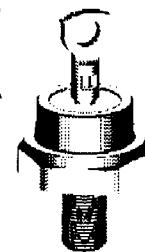
**Advantages**

- Space and weight savings
- Simple mounting
- Improved temperature and power cycling
- Reduced protection circuits

$V_{RRM}$ V	$V_{(BR)min}$ ① V	$V_{RRM}$ V	Anode on stud	Cathode on stud
900	-	800	DS 75-08B	DSI 75-08B
1300	-	1200	DS 75-12B	DSI 75-12B
1300	1300	1200	DSA 75-12B	DSAI 75-12B
1700	1760	1600	DSA 75-16B	DSAI 75-16B
1900	1950	1800	DSA 75-18B	DSAI 75-18B

① Only for Avalanche Diodes

**DO-203 AB**



1/4-28UNF

A = Anode C = Cathode



**Quality Semi-Conductors**

Symbol	Test Conditions	Maximum Ratings	
$I_{F(RMS)}$	$T_{VJ} = T_{VJM}$	160	A
$I_{F(AVJM)}$	$T_{case} = 100^{\circ}C$ ; 180° sine	110	A
$P_{RSM}$	DSA(I) types, $T_{VJ} = T_{VJM}$ , $t_b = 10 \mu s$	20	kW
$I_{FSM}$	$T_{VJ} = 45^{\circ}C$ ; $V_R = 0$	t = 10 ms (50 Hz), sine	1400 A
		t = 8.3 ms (60 Hz), sine	1500 A
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	1250 A
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	1310 A
$I^2t$	$T_{VJ} = 45^{\circ}C$	t = 10 ms (50 Hz), sine	9800 A <sup>2</sup> s
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	9450 A <sup>2</sup> s
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	7820 A <sup>2</sup> s
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	7210 A <sup>2</sup> s
$T_{VJ}$		-40...+180	°C
$T_{VJM}$		180	°C
$T_{stg}$		-40...+180	°C
$M_d$	Mounting torque	2.4-4.5	Nm
		21-40	lb.in.
Weight		21	g

Symbol	Test Conditions	Characteristic Values	
$I_R$	$T_{VJ} = T_{VJM}$ ; $V_R = V_{RRM}$	≤ 6	mA
$V_F$	$I_F = 150 A$ ; $T_{VJ} = 25^{\circ}C$	≤ 1.17	V
$V_{T0}$	For power-loss calculations only	0.75	V
$r_T$	$T_{VJ} = T_{VJM}$	2	mΩ
$R_{thJC}$	DC current	0.5	K/W
$R_{thJH}$	DC current	0.9	K/W
$d_s$	Creepage distance on surface	4.05	mm
$d_A$	Strike distance through air	3.9	mm
$a$	Max. allowable acceleration	100	m/s <sup>2</sup>

Dimensions in mm (1 mm = 0.0394")

