

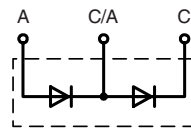
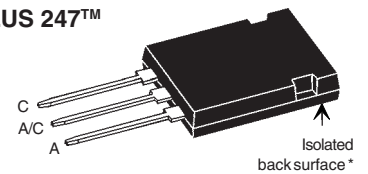
# Power Schottky Rectifier dual diode

$$I_{FAV} = 2 \times 30 \text{ A}$$

$$V_{RRM} = 100 \text{ V}$$

$$V_F = 0.63 \text{ V}$$

$V_{RSM}$	$V_{RRM}$	Type
V	V	
100	100	DSSS 30-01AR


**ISOPLUS 247™**


C = Cathode, A = Anode

Symbol	Conditions	Maximum Ratings	
$I_{FRMS}$		70	A
$I_{FAV}$	$T_C = 155^\circ\text{C}$ ; rectangular, $d = 0.5$	30	A
$I_{FAV}$	$T_C = 155^\circ\text{C}$ ; rectangular, $d = 0.5$ ; per device	60	A
$I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $t_p = 10 \text{ ms}$ (50 Hz), sine	600	A
$E_{AS}$	$I_{AS} = 15 \text{ A}$ ; $L = 100 \mu\text{H}$ ; $T_{VJ} = 25^\circ\text{C}$ ; non repetitive	11.3	mJ
$I_{AR}$	$V_A = 1.5 \cdot V_{RRM}$ typ.; $f = 10 \text{ kHz}$ ; repetitive	1.5	A
$(dv/dt)_{cr}$		5000	V/ $\mu\text{s}$
$T_{VJ}$		-55...+175	$^\circ\text{C}$
$T_{VJM}$		175	$^\circ\text{C}$
$T_{stg}$		-55...+150	$^\circ\text{C}$
$P_{tot}$	$T_C = 25^\circ\text{C}$	190	W
$F_C$	mounting force with clip	20...120	N
$V_{ISOL}$	50/60 Hz, RMS; $t = 1 \text{ s}$	3000	V~
Weight	typical	6	g

**Features**

- International standard package
- Very low  $V_F$
- Extremely low switching losses
- Low  $I_{RM}$ -values
- Isolated and UL registered E153432

**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	$V_R = V_{RRM}$ ; $T_{VJ} = 25^\circ\text{C}$		2 mA
	$V_R = V_{RRM}$ ; $T_{VJ} = 125^\circ\text{C}$		20 mA
$V_F$	$I_F = 30 \text{ A}$ ; $T_{VJ} = 125^\circ\text{C}$		0.63 V
	$I_F = 30 \text{ A}$ ; $T_{VJ} = 25^\circ\text{C}$		0.79 V
	$I_F = 60 \text{ A}$ ; $T_{VJ} = 125^\circ\text{C}$		0.78 V
$R_{thJC}$			0.8 K/W
$R_{thCH}$	0.25		K/W

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

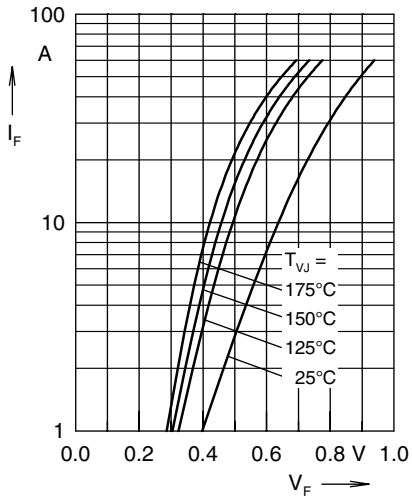


Fig. 1 Max. forward voltage drop characteristics

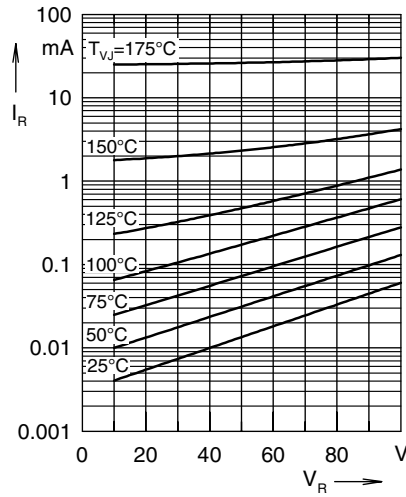


Fig. 2 Typ. reverse current  $I_R$  versus reverse voltage

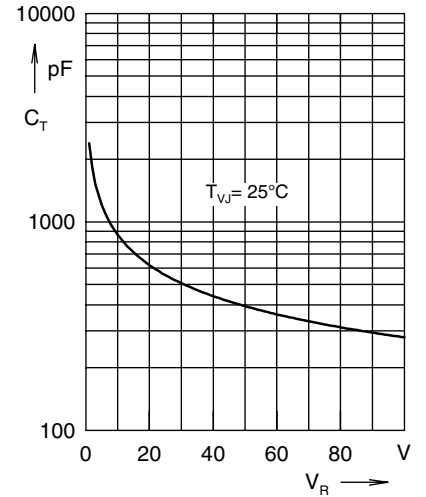


Fig. 3 Typ. junction capacitance  $C_T$  vs. reverse voltage  $V_R$

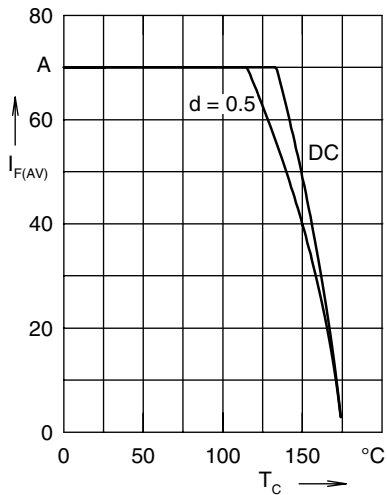


Fig. 4 Avg. forward current  $I_{F(AV)}$  vs. case temperature  $T_C$

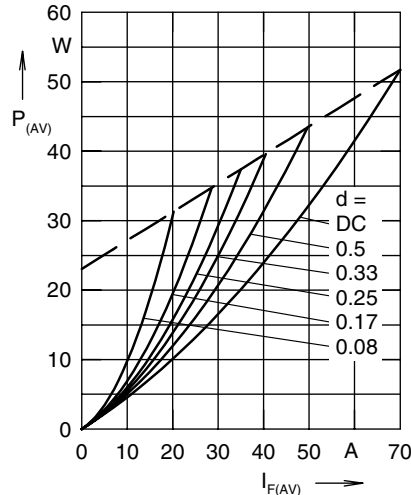


Fig. 5 Forward power loss characteristics

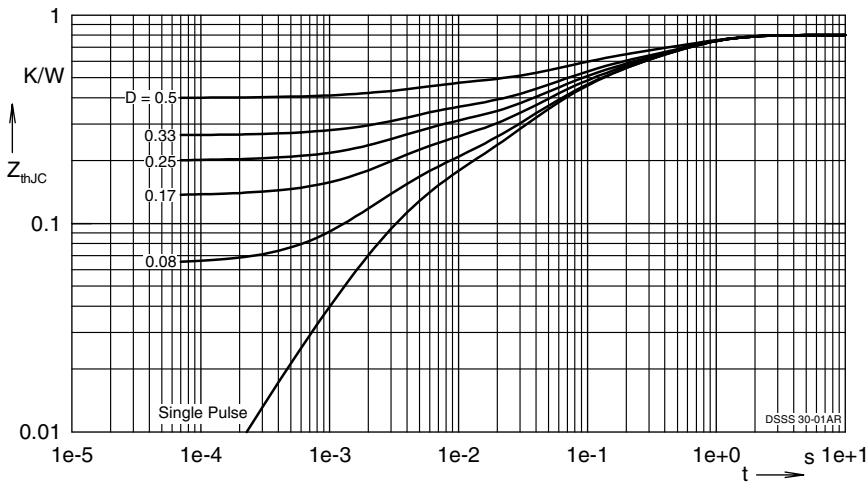


Fig. 6 Transient thermal impedance junction to case at various duty cycles

Note: All curves are per diode

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Schottky Diodes & Rectifiers](#) category:*

*Click to view products by [IXYS](#) manufacturer:*

Other Similar products are found below :

[MA4E2039](#) [D1FH3-5063](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#) [RB551V-30](#) [BAS16E6433HTMA1](#) [BAT](#)  
[54-02LRH E6327](#) [NSR05F40QNXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#) [SK310-T](#) [SK32A-LTP](#) [SK34B-TP](#)  
[SS3003CH-TL-E](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [SB007-03C-TB-E](#) [SK32A-TP](#) [SK33B-TP](#)  
[SK38B-TP](#) [NRVBM120LT1G](#) [NTE505](#) [NTSB30U100CT-1G](#) [SS15E-TP](#) [VS-6CWQ10FNHM3](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#)  
[ACDBA140-HF](#) [ACDBA2100-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [CDBQC0240LR-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#)  
[SK310B-TP](#) [MA4E2502L-1246](#) [MA4E2502H-1246](#) [NRVBM120ET1G](#) [NSR01L30MXT5G](#) [NTE573](#) [NTE6081](#) [SB560](#) [PMAD1108-LF](#)  
[SD103ATW-TP](#)