

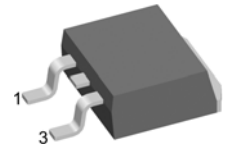
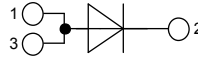
Standard Rectifier

Single Diode

$V_{RRM} = 800 \text{ V}$
 $I_{FAV} = 20 \text{ A}$
 $V_F = 1.12 \text{ V}$

Part number

DLA 20 IM 800 PC



Backside: cathode

E72873

Features / Advantages:

- Planar passivated chips
- Very low leakage current
- Very low forward voltage drop
- Improved thermal behaviour

Applications:

- Diode for main rectification

Package:

- Housing: TO-263 (D2Pak)
- Industry standard outline
- Epoxy meets UL 94V-0
- RoHS compliant

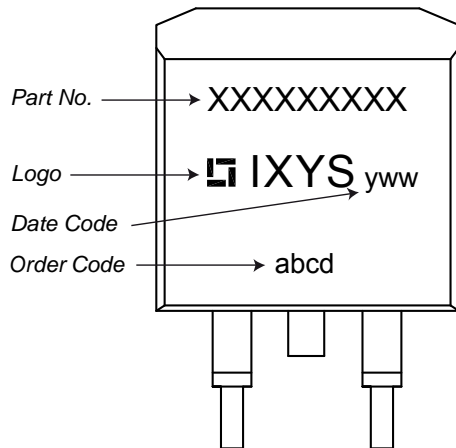
Ratings

Symbol	Definition	Conditions	Ratings			Unit
			min.	typ.	max.	
V_{RRM}	max. repetitive reverse voltage				800	V
I_R	reverse current	$V_R = 800 \text{ V}$			10	μA
		$V_R = 800 \text{ V}$			0.05	mA
V_F	forward voltage	$I_F = 20 \text{ A}$			1.20	V
		$I_F = 40 \text{ A}$				V
		$I_F = 20 \text{ A}$			1.12	V
		$I_F = 40 \text{ A}$				V
I_{FAV}	average forward current	rectangular, d = 0.5			20	A
V_{FO}	threshold voltage	} for power loss calculation only			0.80	V
r_F	slope resistance				19	$\text{m}\Omega$
R_{thJC}	thermal resistance junction to case				1.80	K/W
T_{VJ}	virtual junction temperature		-55		175	$^{\circ}\text{C}$
P_{tot}	total power dissipation				83	W
I_{FSM}	max. forward surge current	t = 10 ms (50 Hz), sine			200	A
		t = 8,3 ms (60 Hz), sine			220	A
		t = 10 ms (50 Hz), sine			180	A
		t = 8,3 ms (60 Hz), sine			200	A
I_t^2	value for fusing	t = 10 ms (50 Hz), sine			205	A^2s
		t = 8,3 ms (60 Hz), sine			207	A^2s
		t = 10 ms (50 Hz), sine			167	A^2s
		t = 8,3 ms (60 Hz), sine			172	A^2s
C_J	junction capacitance	$V_R = \text{tbd V}; f = 1 \text{ MHz}$		tbd		pF

Symbol	Definition	Conditions	Ratings			Unit
			min.	typ.	max.	
I_{RMS}	RMS current	per pin ¹⁾			35	A
R_{thCH}	thermal resistance case to heatsink			0.25		K/W
T_{stg}	storage temperature		-55		150	°C
Weight				2		g
F_c	mounting force with clip		20		60	N

¹⁾ I_{RMS} is typically limited by: 1. pin-to-chip resistance; or by 2. current capability of the chip.
 In case of 1, a common cathode/anode configuration and a non-isolated backside, the whole current capability can be used by connecting the backside.

Product Marking

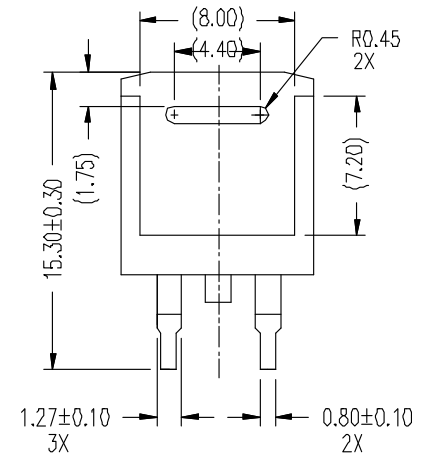
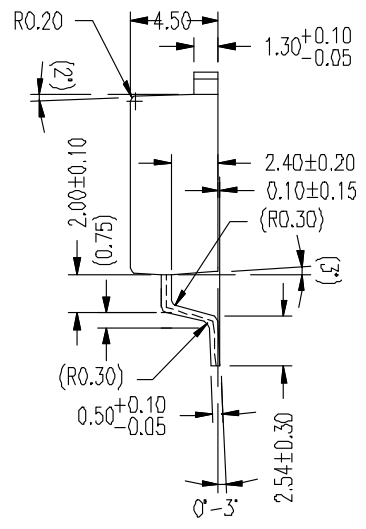
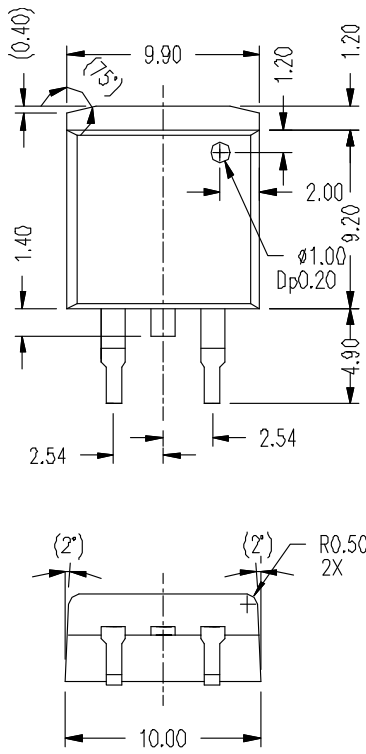


Part number

D = Diode
 L = Standard Rectifier
 A = (up to 1200V)
 20 = Current Rating [A]
 IM = Single Diode
 800 = Reverse Voltage [V]
 PC = TO-263AB (D2Pak) (2)

Ordering	Part Name	Marking on Product	Delivering Mode	Base Qty	Code Key
Standard	DLA 20 IM 800 PC	DLA20IM800PC	Tape & Reel	800	

Outlines TO-263 (D2Pak)



NOTE:
 1. These dimensions do not include mold protusion.
 2. () is reference dimension only.