TOSHIBA 1DL42

TOSHIBA HIGH EFFICIENCY RECTIFIER (HED) SILICON EPITAXIAL JUNCTION TYPE

# D L 4 2

#### SWITCHING TYPE POWER SUPPLY APPLICATIONS

Repetitive Peak Reverse Voltage  $: V_{RRM} = 200 V$ 

Average Forward Current  $: I_{F(AV)} = 1.0 A$ 

Low Forward Voltage : VFM = 0.98 V

Available to Reduce Switching Losses and Output Noise.

Very Fast Reverse-Recovery Time :  $t_{rr} = 60 \text{ ns}$  (Max.)

### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Reverse Voltage	$v_{RRM}$	200	V
Average Output Rectified Current	I <sub>F (AV)</sub>	1.0	A
Peak One Cycle Surge Forward Current	$I_{FSM}$	10 (50 Hz)	A
Junction Temperature	$T_{ m j}$	-40~150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-40~150	°C

 $\phi 0.6$ 1. ANODE 2. CATHODE **JEDEC EIAJ TOSHIBA** 3-3F2A

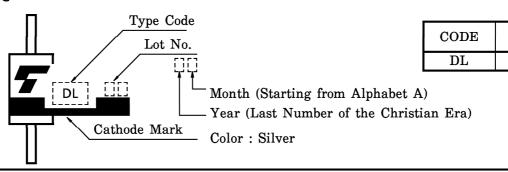
Unit in mm

Weight: 0.18 g

### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Peak Forward Voltage	$V_{FM}$	$I_{\text{FM}} = 1.0 \text{ A}$	_	_	0.98	V
Repetitive Peak Reverse Current	I <sub>RRM</sub>	$V_{RRM} = 200 V$	_	_	100	$\mu$ <b>A</b>
Reverse Recovery Time	trr	$I_{\rm F} = 1  { m A,  di / dt} = -20  { m A /  \mu s}$	_	_	60	ns
Forward Recovery Time	tfr	$I_{\mathbf{F}} = 1.0 \text{ A}$	_	_	100	ns

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