

KEC

SEMICONDUCTOR
TECHNICAL DATAE30A27VS, E30A27VR
STACK SILICON DIFFUSED DIODE

ALTERNATOR DIODE FOR AUTOMOTIVE APPLICATION.

FEATURES

- Average Forward Current : $I_O=30A$.

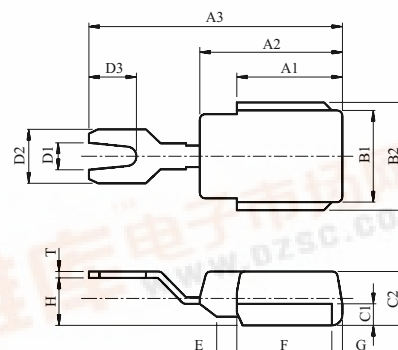
POLARITY

E30A27VS E30A27VR

(+ Type) (- Type)

MAXIMUM RATING ($T_a=25^{\circ}C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Reverse Voltage	V_{DC}	24	V
Average Forward Current	$I_{F(AV)}$	30	A
Peak 1 Cycle Surge Current	I_{FSM}	250 (50Hz)	A
Non-Repetitive Reverse 1 Cycle Surge Current	I_{RSM}	50	A
Junction Temperature	T_j	-40 ~ 150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-40 ~ 150	$^{\circ}C$



DIM	MILLIMETERS	DIM	MILLIMETERS
A1	10.0±0.3	D2	5.0±0.3
A2	13.5±0.3	D3	4.5±0.3
A3	24.0±0.5	E	1.9±0.3
B1	8.5±0.3	F	9.0±0.3
B2	10.0±0.3	G	1.0±0.3
C1	2.0±0.3	H	4.4±0.5
C2	5.0±0.3	T	0.6±0.3
D1	2.5±0.3		

MR

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Zener Voltage	V_Z	$I_Z=10mA$	24	-	30	V
Peak Forward Voltage	V_{FM}	$I_{FM}=100A$	-	-	1.2	V
Repetitive Peak Reverse Current	I_{RRM}	$V_{RRM}=24V$	-	-	50	μA
Zener Voltage Temperature Coefficient	r_Z	$I_Z=10mA$	23	-	36	mV/ $^{\circ}C$
Reverse Recovery Time	t_{rr}	$I_F=0.1A, I_R=0.1A$	-	-	15	μS
Temperature Resistance	R_{th}	DC total junction to case	-	-	1.0	$^{\circ}C/W$

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