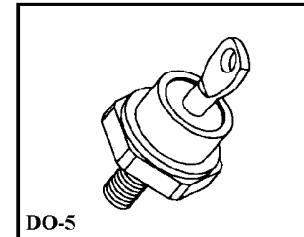


ULTRA FAST RECOVERY RECTIFIER

- VERY LOW CONDUCTION LOSSES
- NEGLIGIBLE SWITCHING LOSSES
- LOW FORWARD AND REVERSE RECOVERY TIMES
- HIGH SURGE CURRENT AND AVALANCHE CAPABILITY



LOW VOLTAGE DROP RECTIFIER SUITABLE FOR SWITCH MODE POWER SUPPLY

ABSOLUTE RATINGS (limiting values)

PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Forward Current	$I_D \leq 20 \mu s$	500	A
RMS Forward Current	$I_{F(RMS)}$	70	A
Average Forward Current	$T_C = 115^\circ C, \delta = 0.5$	35	A
Surge non Repetitive Forward Current	$T_D = 10ms$ Sinusoidal	500	A
Power Dissipation	$T_C = 100^\circ C$	50	W
Storage and Junction Temperature Range	T_{stg}, T_J	-40 to 150	$^\circ C$

PARAMETER	SYMBOL	NSD92-				UNIT
		50	100	150	200	
Repetitive Peak Reverse Current	V_{RRM}	50	100	150	200	V
Non Repetitive Peak Reverse Current	V_{RSM}	55	110	155	220	V

THERMAL RESISTANCE

PARAMETER	SYMBOL	VALUE	UNIT
Junction - to - Case	$R_{\theta JC}$	1.0	$^\circ C/W$

ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

TEST CONDITIONS	SYMBOL	MAX.	UNIT
$T_J = 25^\circ C$	I_R	50	μA
$T_J = 100^\circ C$		5.0	mA
$T_J = 25^\circ C$	V_F	1.3	V
$T_J = 100^\circ C$		0.92	

RECOVERY CHARACTERISTICS

TEST CONDITIONS	SYMBOL	MAX.	UNIT
$T_J = 25^\circ C, V_R = 30 V$	t_{rr}	70	ηs
$T_J = 25^\circ C, V_R \leq 30 V$		50	ηs