

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

DMT6010SCT

FEATURES

- Drain Current –I_D= 98A@ T_C=25 $^\circ\!\!\!\mathrm{C}$
- Drain Source Voltage : V_{DSS}= 60V(Min)
- Static Drain-Source On-Resistance
- : R_{DS(on)} = 7.2m Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

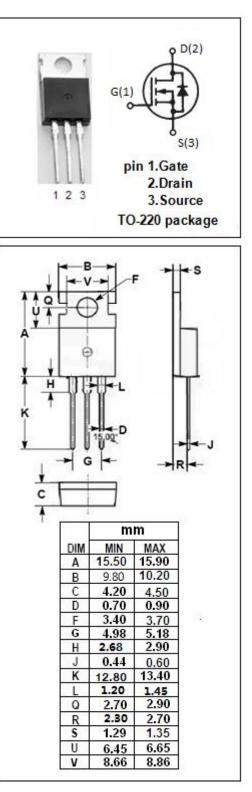
 Designed for use in switch mode power supplies and general purpose applications.

SYMBOL PARAMETER VALUE UNIT				
SYMBOL	PARAMETER VA		UNIT	
V _{DSS}	Drain-Source Voltage	60	V	
V _{GS}	Gate-Source Voltage-Continuous	±20	V	
ID	Drain Current-Continuous 98		A	
I _{DM}	Drain Current-Single Pluse	160	A	
PD	Total Dissipation @Tc=25℃	104	w	
TJ	Max. Operating Junction Temperature	-55~150	°C	
T _{stg}	Storage Temperature	-55~150	°C	

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.2	°C/W





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ELECTRICAL CHARACTERISTICS

$T_{\text{C}}\text{=}25\,^{\circ}\!\!\!\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 0.25mA	60		V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D = 0.25mA	2.0	4.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D = 20A		7.2	mΩ
lgss	Gate-Body Leakage Current	V _{GS} = ±20V;V _{DS} = 0		±100	nA
ldss	Zero Gate Voltage Drain Current	V _{DS} = 48V; V _{GS} = 0		1.0	μA
V _{SD}	Forward On-Voltage	I _S = 20A; V _{GS} = 0		1.3	V

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