

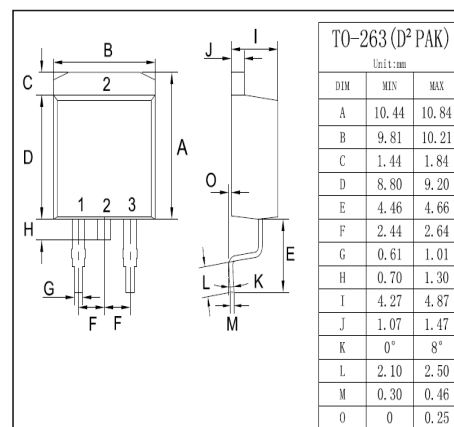
TO-263 Plastic-Encapsulate Transistors

FEATURES

- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
Soft, Fast Switching Capability
- Case Material: Molded Plastic, UL Flammability
Classification Rating 94V-0

MECHANICAL DATA

- Case: TO-263 molded plastic body
- Terminals: Matte Tin Finish annealed over Copper
leadframe Solderable per MIL-STD-202, Method 208
- Packing: 50pcs/Tube 800pcs/Reel



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate by 20%.

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum rms voltage	V_{RMS}	70	V
Maximum average forward rectified current	$I_{F(AV)}$	40 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	300	A
Typical thermal resistance per diode	$R_{\theta JC}$	2	°C/W
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{STG}	-55 to +150	°C

Note : 1. Mounted on infinite heatsink.

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown voltage per diode	V_{BR}	$I_R=0.5mA$	100	-	-	V
Instantaneous forward voltage per diode	V_F	$I_F=5A$	-	0.46	-	V
		$I_F=10A$	-	0.55	-	
		$I_F=20A$	-	0.65	0.70	
		$I_F=5A$	-	0.38	-	V
		$I_F=10A$	-	0.50	-	
		$I_F=20A$	-	0.55	-	
Reverse current per diode	I_R	$V_R=70V$	-	5	-	μA
			-	6	-	mA
		$V_R=100V$	-	-	100	μA
		$T_J=25^\circ C$ $T_J=125^\circ C$	-	12	-	mA

RATINGS AND CHARACTERISTIC CURVES

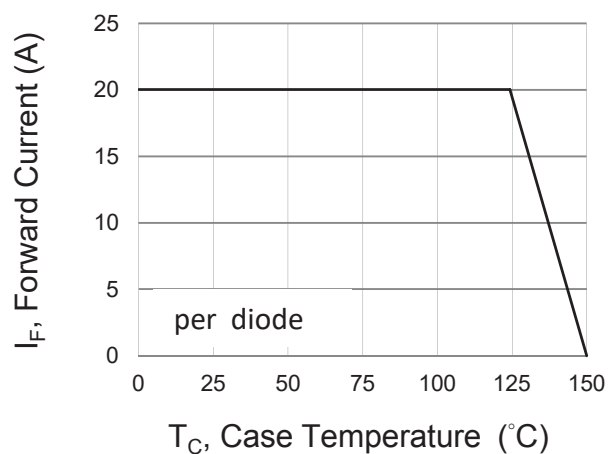


Fig.1 Forward Current Derating Curve

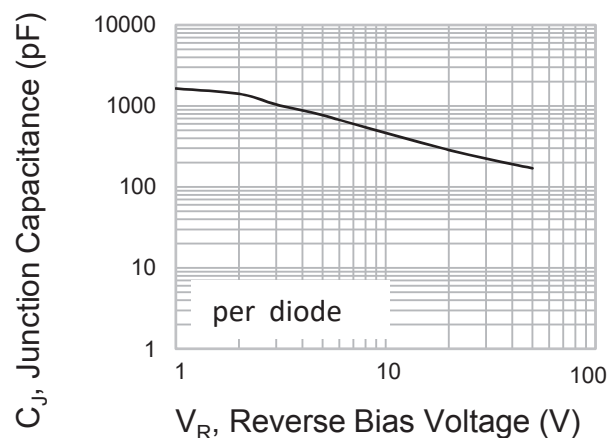


Fig.2 Typical Junction Capacitance

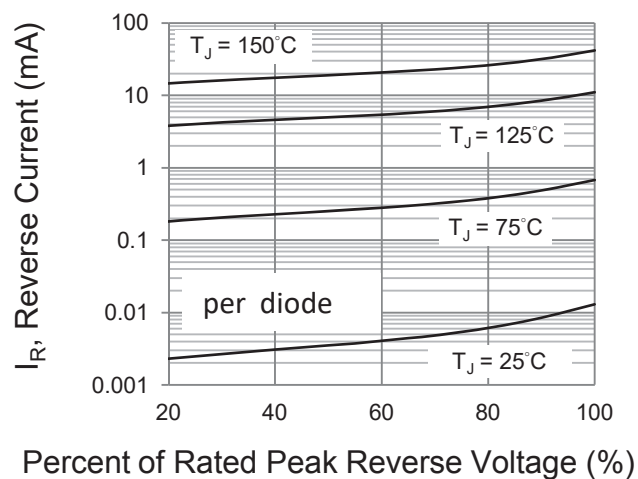


Fig.3 Typical Reverse Characteristics

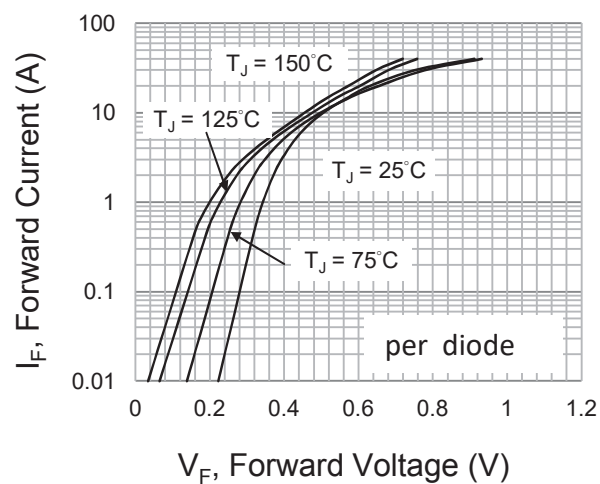


Fig.4 Typical Forward Characteristics